

Marcin Burghardt*

Weapon and the military of the population of the West Podolian group of the Early Scythian culture in the light of sepulchral sources¹

Weapon and the military of the population of the West Podolian group of the Early Scythian culture in the light of sepulchral sources

The article has discussed the issue of weapon and the military of the population of the West Podolian group of the Early Scythian culture. The image, obtained on the basis of 49 burials with weapon does not differ from other communities of the forest-steppe variant of the Scythian culture. The common element for the entire amount of burials with weapon is their almost exclusive relationship with male graves. The most numerous kind of weapon was a bow with arrows (89.9% of burials with weapon of the West Podolian group of the Early Scythian culture). Regarding the wealthy military burials, the arrows were also accompanied by other categories of offensive weapons – spears (22.4%), blunt weapon (hammer-axes and battle-axes) (16.3%) and cutting weapon (10.2%). The richest warriors, including the members of local elites, apart from a few-item sets of weapon they were equipped with scale armour finished with metal plates at the edge (14%). Moreover, there were the elements of the horse harness in every fifth burial with weapon. This points to a slightly lesser role of cavalry than it was in the case of the other groups of the forest-steppe variant of the Scythian culture. The presence of a few-item sets of offensive weapons and armour in the graves indicates the presence of professional warriors, so-called „troopers” (18% of burials with weapon) in the Middle Dniester group. These warriors were part of military bands (troops), headed by the members of the local upper class (elites) (6%). The remaining military forces were warriors coming from the lower social strata.

KEY WORDS: Middle Dniester area, West Podolian group, Early Scythian culture, weapon, military structure

Submission: 22.06.2015; acceptance: 12.10.2015

One of the most characteristic features of funeral rites regarding the community of the Scythian culture is the presence of burials equipped with specific sets of weapons: quivers with arrows sets with characteristic forms of arrowheads, as well as daggers and swords (type acinaces), spears with iron points and iron axe-hammers. These objects were also accompanied quite often by elements of horse tack, usually made in a specific, so-called animal style. Moreover, the similar situation is observed as for the West Podolian group of the Early Scythian culture (called here RSK) constituting the outermost, located in the western range of the group of the forest-steppe variant of the Scythian culture.

The presence of weapons has been revealed in 49 burial complexes, representing 39.2% of all burials of the West Podolian group of RSK. Anthropological studies and analysis of the inventory sets noticed that almost all burials with weapons, for which it was possible to determine the sex and age of the dead belonged to a man or men, who were accompanied by others dead. Only in one case (Šutnivci, k. 5) the presence of weapons has been indicated in an individual grave with

female inventory, which contained (apart from a single arrowhead and hand-made pottery) more than 240 beads, four bronze pins and a piece of ochre (A. F. Gucal, V. A. Gucal 2009, p. 11). However, it should be noted that not all the male graves were equipped with armament pieces –there are at least three known male graves without this type of funerary equipment, which are either double male-female burials (Malinivci, k. 1, p. 1 – A. G. Gucal *et al.* 2004, p. 115; Šutnivci k. 4, p. 2 – A. F. Gucal, V. A. Gucal 2009, p. 10) or collective ones, which buried the man in the company of other people (Sokilec, k. 5 – M. Bandrivs’kij 2010, pp. 107–109, Fig. 14).

The main type of arms of the West Podolian population affiliating to RSK was a bow and arrows. The arrowheads made of bronze, iron and bone have been found in 89.8% (44 of 49) burials with weapons including protective weapon and in 93.6% (44 of 47) burials only with offensive weapon. In addition to numerous arrowheads and bows which were unfamiliar in the environment of the analyzed group, there were also finds linked with this category of weapons such as cases for arrows and a bow i.e. quivers and sajdaks (containers for arrows) and gorytos (cases for bows which often housed additional containers for arrows). Wooden quivers or sajdaks were found in only two burial complexes. The first recorded find of this type was under the *burial mound at Gorodok*,

¹ The project was funded with resources of National Centre of Science the admitted on basis of decision the number DEC-2013/09/N/HS3/02839

* Instytut Archeologii UR, ul. Moniuszki 10, 35-015 Rzeszów

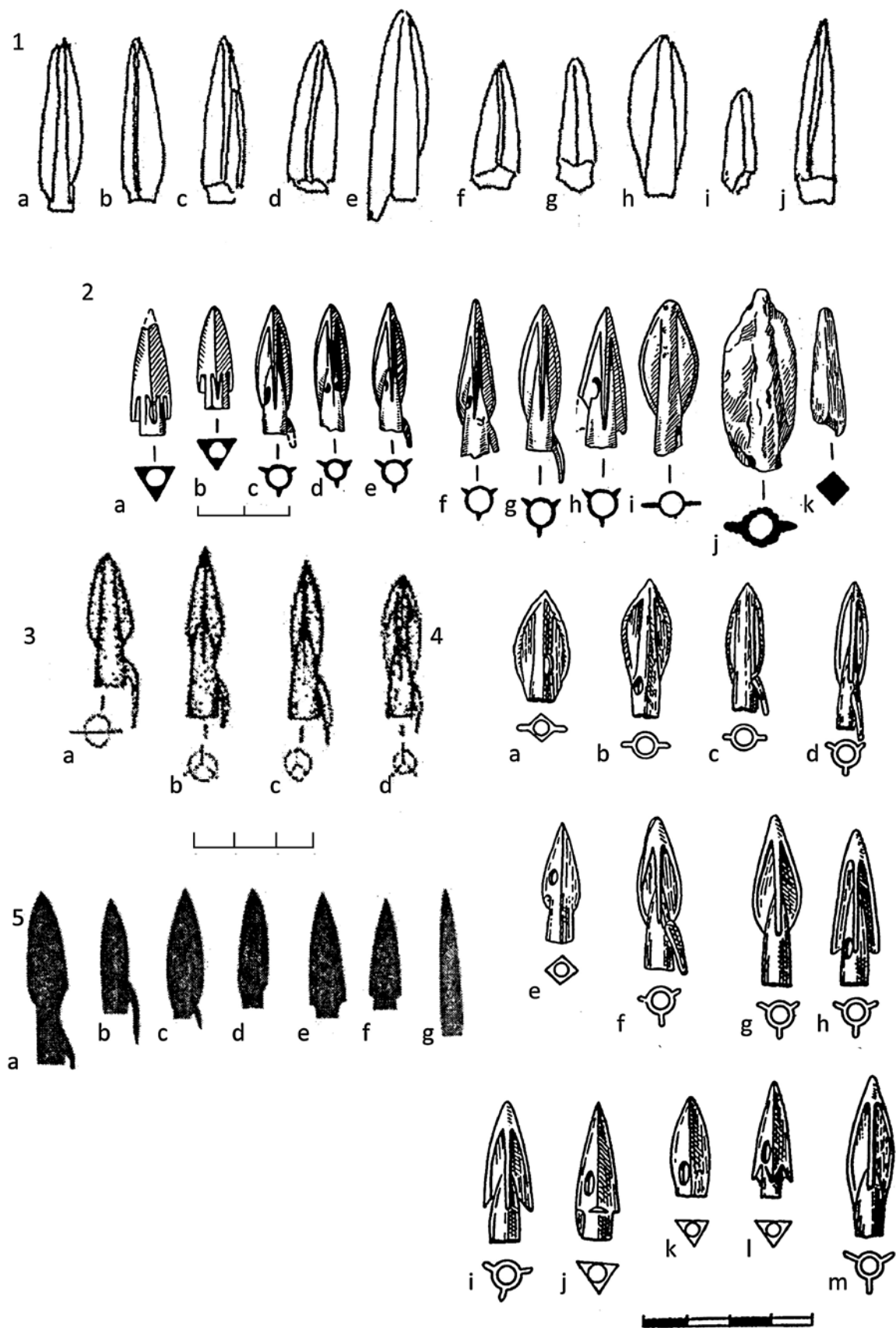


Fig. 1. Sets of quivers coming from selected burial complexes of the West Podolian group of RSK. 1 – Duplis'ka, k. 1; 2 – Dolina, k. 2; 3 – Kolodivka, k. 8; 4 – Kruglik; 5 – Kragle, k. 1. 1, 4 – no scale. (1 – by M. Bandrivs'kij 2010; 2 – by G. I. Smirnova 1977; 3 – by et al. 2006; 4 – by G. I. Smirnova 1969; 5 – by T. Sulimirski 1936)

Ryc. 1. Zestawy kołczanowe z wybranych zespołów grobowych zachodniopodolskiej grupy RSK. 1 – Duplis'ka, k. 1; 2 – Dolinány, k. 2; 3 – Kolodivka, k. 8; 4 – Kruglik; 5 – Kragle, k. 1. 1, 4 – bez skali. (1 – wg M. Bandrivs'kij 2010; 2 – wg G. I. Smirnova 1977; 3 – wg et al. 2006; 4 – wg G. I. Smirnova 1969; 5 – wg T. Sulimirski 1936)

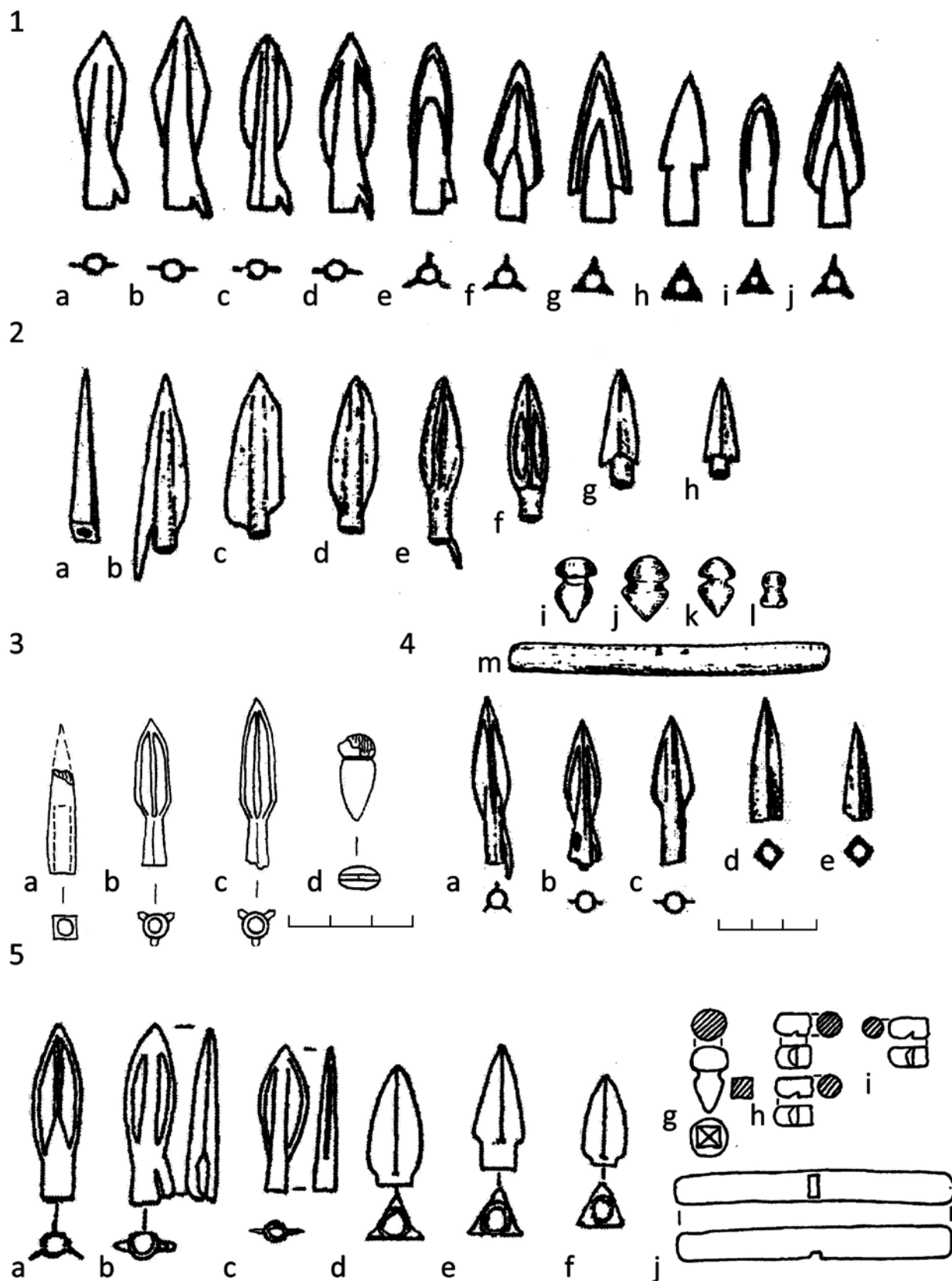


Fig. 2. Sets of quivers coming from selected burial complexes of the West Podolian group of RSK. 1 – Lenkivcy, k. 1; 2 – Novoselka-Grimajlovská (Nowosiółka Grzymałowska), k. C; 3 – Myškovce, k. 1; 4 – Perebykivci, k. 5; 5 – Sokilec, k. 3. 1–2, 5 – no scale. (1 – by A. I. Melúkova 1964; 2 a–h – by M. Bandrivs'kij 2010; 2, i–m – by T. Sulimirski 1936; 3 – by Ů. Maleev, 1991; 4 – by G. I. Smirnova 1979; 5 – by M. Bandrivs'kij, V. Zhar'ev 2002)

Ryc. 2. Zestawy kołczanowe z wybranych zespołów grobowych zachodniopodolskiej grupy RSK. 1 – Lenkivcy, k. 1; 2 – Novoselka-Grimajlovská (Nowosiółka Grzymałowska), k. C; 3 – Myškovce, k. 1; 4 – Perebykivci, k. 5; 5 – Sokilec, k. 3. 1–2, 5 – bez skali. (1 – wg A. I. Melúkova 1964; 2, a–h – wg M. Bandrivs'kij 2010; 2, i–m – wg T. sulimirski 1936; 3 – wg Ů. Maleev 1991; 4 – wg G. I. Smirnova 1979; 5 – wg M. Bandrivs'kij, V. Zhar'ev 2002)

however, as it was written by T. Sulimirski (1936, p. 68) that quiver „was so rotten that it was impossible to excavate it, nor reconstructed its form”. The remains of the second quiver was noticed within the burial construction in the barrow No. 6 in Šutnivci. As it was written by the explorers, the basis of the quiver „was wooden and reached a width of 20 cm” (A. F. Gucal, V. A. Gucal 2009, p. 12). The discussed container kept 30 bronze, iron and bone arrowheads.

Compared with wooden quivers (*sajdaks*), more numerous finds are the bone elements of the *gorytos*. These items, appearing together with arrowheads, can be divided into two groups: „toggle buttons” and reeving devices². The presence of this type of objects was recorded in four burial complexes, which is approximately 9% of all burials with arrowheads. Three of them (Nowosiółka Grzymałowska, k. C; Perebykivci k. 2; Sokilec, k. 3) contained both „toggle buttons” and reeving devices, however the first type of fasteners was more common and it occurred in a ratio of 4–5 to 1 comparing with reeving devices. Only in one case (Myškovce, k. 1) the researchers noted the presence of a single „toggle button” (Fig. 2: 5d).

Bone reeving devices, coming from the West Podolian group of RSK (3 copies), being probably used to fasten the flaps of *gorytos*, show a similar form (Fig. 2: 4m, 5j). They are not very carefully made, long objects with rounded ends. The element differentiating them is the absence or presence of decorations. This element appeared only in the case of the reeving device uncovered in the barrow No. 2 near the village Perebykivci and it had a form of transverse, double engraved lines located in the middle and at both ends of the artefact (Fig. 3: 2.21). In the classification of E. V. Černenko (1981, pp. 38–39), similar items are grouped as the second type. However, with regard to the analyzed group of culture, so far there were no items classified by the researcher as the first type, which might gather objects of thinned ends, and narrowed frequently in the middle of it.

Moreover, bone buttons and toggles are represented by 14 items with a mushroom-shaped or plug-shaped head (Fig. 2: 3, i–l, 5 g–i, 3: 2.16–20). These objects shall be interpreted as decorative elements of quivers or *gorytos* without any particular functional purpose (E. V. Černenko 1981, p. 33). On the other hand, bone buttons and toggles could be used to connect several layers of the leather to produce quivers and *gorytos* (V. I. Kločko 1977, p. 49).

Bony elements of *gorytos* with toggle-button and reeving device types, coming from the West Podolian burial mounds, have close counterparts regarding the other complexes from Scythia. In terms of chronology, the objects of this type are linked with archaic stage of the Scythian culture (V. Murzin 1984, p. 74; I. N. Medvedskaâ 1992, Table. 1), whereas the oldest items can be dated even at the end of the eighth and the beginning of the seventh century BC (G. Kossack 1987, p. 43–

–48, Fig. 12: 3, 4). In addition to the above described bony elements of the quivers, the arrows (and bows) containers were also accompanied by strap clamps, generally made of bone (Perebykivci, k. 2, quiver set No. 2 – Fig. 3: 2.22–23).

The amount of arrowheads uncovered in the West Podolian group of RSK ranged from 1–2 to 213, whereas in the last case the arrowheads constituted two sets counting respectively, 133 and 80 copies. Nonetheless, predominant burials were the objects with a small number of arrowheads up to 10 copies. Complexes with higher amount of arrowheads accounted for only 1/5 of all complexes with a certain number of arrowheads. This state of affairs is due to the robbery of most burial complexes of the discussed cultural group. Assuming that the arrowheads (quivers with arrowheads) were one of the aims of the robbers, it is possible to presume that the number of arrows placed in the burial was much greater than it has been recorded in the course of excavations. This thesis is confirmed by the finds of quivers and *gorytos* with preserved arrowheads (e.g. barrow in the village Gorodok with 11 arrowheads; barrow No. 6 in Šutnovcy with 30 arrowheads). On the other hand, the burial collection coming from the unrobed part beneath the barrow No. 2 at Perebykivci contained a quiver set with 133 arrowheads.

The vast majority of arrowheads was made of bronze (Table 1). Bone and iron arrowheads occurred at a much lower frequency, however the more numerous were the ones made of bone (and antlers). In the classical typology of Scythian weaponry by A. I. Melúkova (1964, pp. 16–19), all arrowheads coming from the burial complexes of the West Podolian group of RSK are linked to 1 group regarding the chronology dated to the end of the eighth and the first half of the seventh centuries BC or the seventh – 1st quarter of the sixth centuries BC taking into account the correction of S. V. Polin (1987, p. 31). In formal terms, this group of arrowheads can be divided into three main types with different cross-sections. These types include: leaf-shaped, trilobate and trilateral arrowheads (Fig. 1–3).

The largest group among metal arrowheads constitutes trilobate and trilateral copies. The participation of both forms is similar and comprises respectively 43 and 44% of all metal arrowheads of a particular form, while their range in individual quiver sets favours one of them. Leaf-shaped arrowheads present approximately 13%. This trend is also visible in individual quiver sets- the number of leaf-shaped arrowheads in individual quiver sets is always less than the total number of trilobate and trilateral items (Fig. 4)³. For example, the ratio

² Artefacts of this type are also common in complexes without arrowheads. In such cases there is no reason to consider them as elements of *gorytos*. Considering the literature, it is assumed that the bone “toggle buttons” and reeving devices also could play the role of horse tack elements or they could be used as fasteners of clothes (e.g. S. A. Skory, 2003, p. 30, there further literature) apart from the elements of *gorytos*. Bone reeving devices could also serve as an element of a multi-fastening item of different objects like armour.

³ It should be noted here that the selection of arrowheads found in individual quiver sets placed together with the deceased to the grave resulted from various factors. On the one hand, they can be so called combat sets, i.e. those items which diversity of arrowheads was due to the functional conditions (technical and combat), and on the other hand they can be the sets in which the criteria was guided by the aspects that are different from technical and combat features, for example symbolic. In the latter case they may be e.g. sets so called sacral (ceremonial), made specifically for ceremonial purposes related with burying the dead (burial). Moreover, the symbolic functions can be combined probably also with the presence of more or less homogeneous sets in terms of chronology and typology, coming from a single quiver (*gorytos*) of individual arrowheads bearing clearly older forms. In this case, it is possible to notice traces related with the activities of e.g. bow and quiver (*sajdak/gorytos*) inheritance, while placing

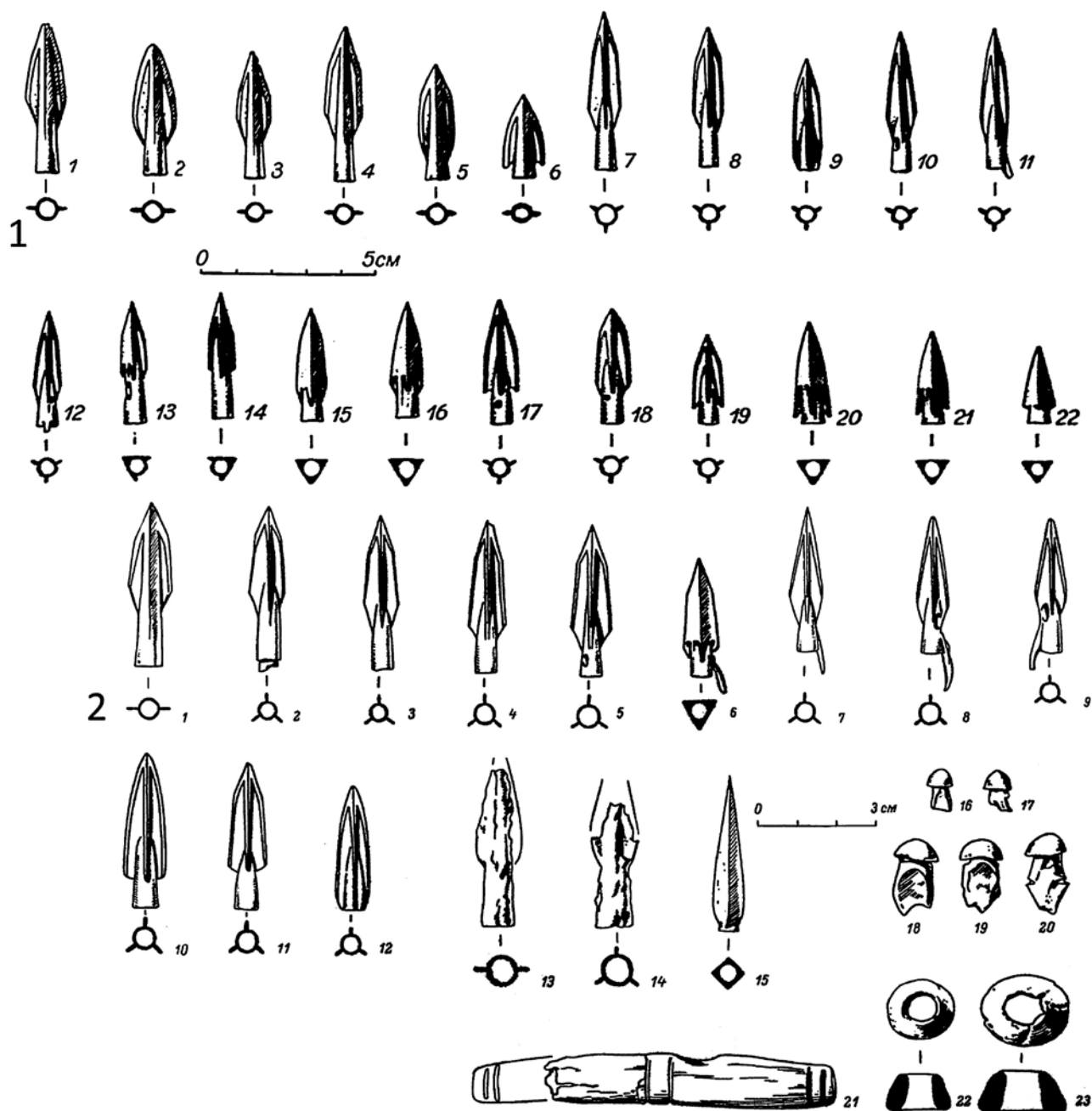


Fig. 3. Sets of quivers No.1 (1) and 2 (2) from the barrow No. 2 in Perebykivci (by G. I. Smirnova 1979)
 Ryc. 3. Zestawy kołczanowe nr 1 (1) i 2 (2) z kurhanu nr 2 z miejscowości Perebykivci (wg G. I. Smirnova 1979)

of particular forms of metal arrowheads (respectively leaf-shaped arrowheads – trilobate arrowheads – trilobate arrowheads) is 3: 7: 4 (Kruglik), 12: 14: 2 (Lenkivcy) or 11:48:74 and 2: 72: 5 (Perebykivci, k. 2, quiver sets 1 and 2) (Fig. 1: 4; 2: 1; 3). On the other hand, sets of metal arrowheads coming from the complexes such as Teklivka, k. 1 and Gorodok contained only trilobate forms (respectively 52 and 11).

the older forms together with the arrowheads corresponding to the requirements of the current fighting techniques, should be treated as a manifestation of the emotional and magical behavior – protection against evil (J. Chochorowski 2014, pp. 36–37, footnotes 43, 44).

Leaf-shaped arrowheads are represented mainly by the copies that can be classified into the three first types according to the classification by A. I. Mel'ukova. These are the arrowheads of symmetrical or asymmetrical diamond-shaped heads, sometimes with a barb of the I/1 type or Endz-Žabotin type in a recent classification (13 copies.), and arrowheads of laurel- or oval-shaped blade of the I-2 type (11 copies.) and items of leaf-shaped point type I-3 (14 copies.). As for these last two types, apart from the items made of bronze, there were also single pieces made of iron. Less frequently there were arrowheads with a sharp transition of the point into the socket I-5 type (8 copies.) as well as the items with an oval or oval-diamond point, which one elongated wing transits into a barb of I-4 type (4 copies.).

Table 1
Raw materials and typological differentiation of arrowheads coming from the burial complexes of the West Podolian group of RSK (typology by A. I. Mel'ukova 1964)

Tabela 1
Zróżnicowanie surowcowe i typologiczne grocików strzał z zespołów grobowych zachodniopodolskiej grupy RSK (typologia wg A. I. Mel'ukovej 1964)

complex	leaf-shaped					trilobate			trilateral		bone arrowheads	
	I-1	I-2	I-3	I-4	I-5	II-1	II-2	II-3	III-1	III-2	quadrangular	circular
Bikív	-	-	2	-	-	-	-	-	-	2 (III-2-6)	-	-
Bratišív, k. 1										1	-	-
Bratišív, k. 2	3 (I-1-2)	-	-	-	-	3	-	-	-	3	-	-
Bratišív, k. 3	-	-	-	-	-	-	-	-	-	-	1	-
Bratišív, k. 5	1	-	1?	-	-	3	-	-	-	-	-	-
Cabanívka, k. 1	Bronze and iron – undefined amount											
Dolinány, k. 2 (Fig. 1, 2)	-	1+1*	-	-	-	6	1	1	1	1	1	-
Dolinány, k. 4	-	-	-	-	-	-	-	-	-	1	-	-
Dupliska, k. 1 (Fig. 1, 1)	-	-	1	1 (I-4-1)	-	1	-	-	-	6	1	-
Gorodek, k. 1	-	-	-	-	-	-	-	-	-	11	-	-
Gorodnica, k. 1	-	-	-	-	-	-	-	-	-	2	-	-
Ivahnívci, k. 1			2			1+1*	2			2	1	-
Ivankívci, k. 9, p. 1	1+1*											
Kačanovka	-	-	-	-	-	-	1	-	-	-	-	-
Kočubínčinkí-2	-	-	-	-	-	1	-	-	-	-	-	-
Kolodivka, k. 1	-	-	1	-	-	-	2	-	-	-	-	-
Kolodivka, k. 8 (Fig. 1, 3)	-	-	1	-	-	1	2	-	-	-	-	-
Kolodivka, k. 19	-	-	-	-	-	1 (II-1-1)	-	-	-	-	-	-
Krugle	-	-	1	-	-	3	-	-	-	2	1	-
Kruglík, k. 1 (Fig. 1, 4)	2	-	1	-	-	2	2 + 1	2	2	2	2	-
Ladičín, k. 1	1	-	-	-	-	-	-	-	-	-	-	-
Lenkivcy, k. 1 (Fig. 2, 1)	5 (I-1-3)	7 (I-2-2)	-	-	-	3 (II-1-1 i 2)	7 (II-2-1 i 2)	4 (II-3-1 i 2)	-	2 (III-2-1)	-	-
Min'kívci, k. 1, p. 1	1	-	-	-	-	-	-	1	-	1	-	-
Mýskovce, k. 1 (Fig. 1, 3)	-	-	-	-	-	-	2	-	-	-	1	-
Novoselka-Grimajlovskaá, k. C (Fig. 1, 2)	-	-	-	3	-	2?	-	-	-	2	3	-
Perebykívci, k. 2, set 1 (Fig. 1, 1)	-	-	4	-	7	-	44	4	4	51	-	-
Perebykívci, k. 2, set 2 (Fig. 1, 2)	-	1*	-	-	1	-	67+1*	4	-	5	1	-
Perebykívci, k. 3	-	-	-	-	-	-	5	-	-	-	-	-
Perebykívci, k. 5 (Fig. 1, 4)	-	-	2	-	-	-	1	-	-	-	4	-
Sokálec, k. 3 (Fig. 1, 5)	-	2	-	-	-	1	-	-	2	1	1	-
Spasívka, k. 1	6											
Spasívka, k. 8, p. 1	-	-	1	-	-	-	-	-	-	-	-	-
Spasívka, k. 9	-	-	1*	-	-	1	-	-	-	-	-	-
Šidlivci, k. 1	-	-	-	-	-	-	-	-	2		-	-
Šutnivci, k. 3	-	-	-	-	-	8	-	2	1	-	-	-
Šutnivci, k. 5	-					1						
Šutnivci, k. 6	16+2*											
Teklivka, k. 1	-	-	-	-	-	-	-	-	10	42	1	2
Vikno	-	-	-	-	-	-	-	-	1	1	-	-
Zozulince, k. 1	-	-	-	-	-	-	-	-	-	1	-	-
TOTAL	13	9+2*	13+1*	4	8	36	136	18	21	137	17	2

Warning! Where it was possible, information included in brackets presents variants distinguished within individual types. An asterisk (*) indicates the arrowheads made of iron; others are made of bronze

Uwaga! W nawiasach podano, tam gdzie to było możliwe, warianty wydzielane w ramach poszczególnych typów. Gwiazdką (*) oznaczono grociki wykonane z żelaza; pozostałe wykonane są z brązu

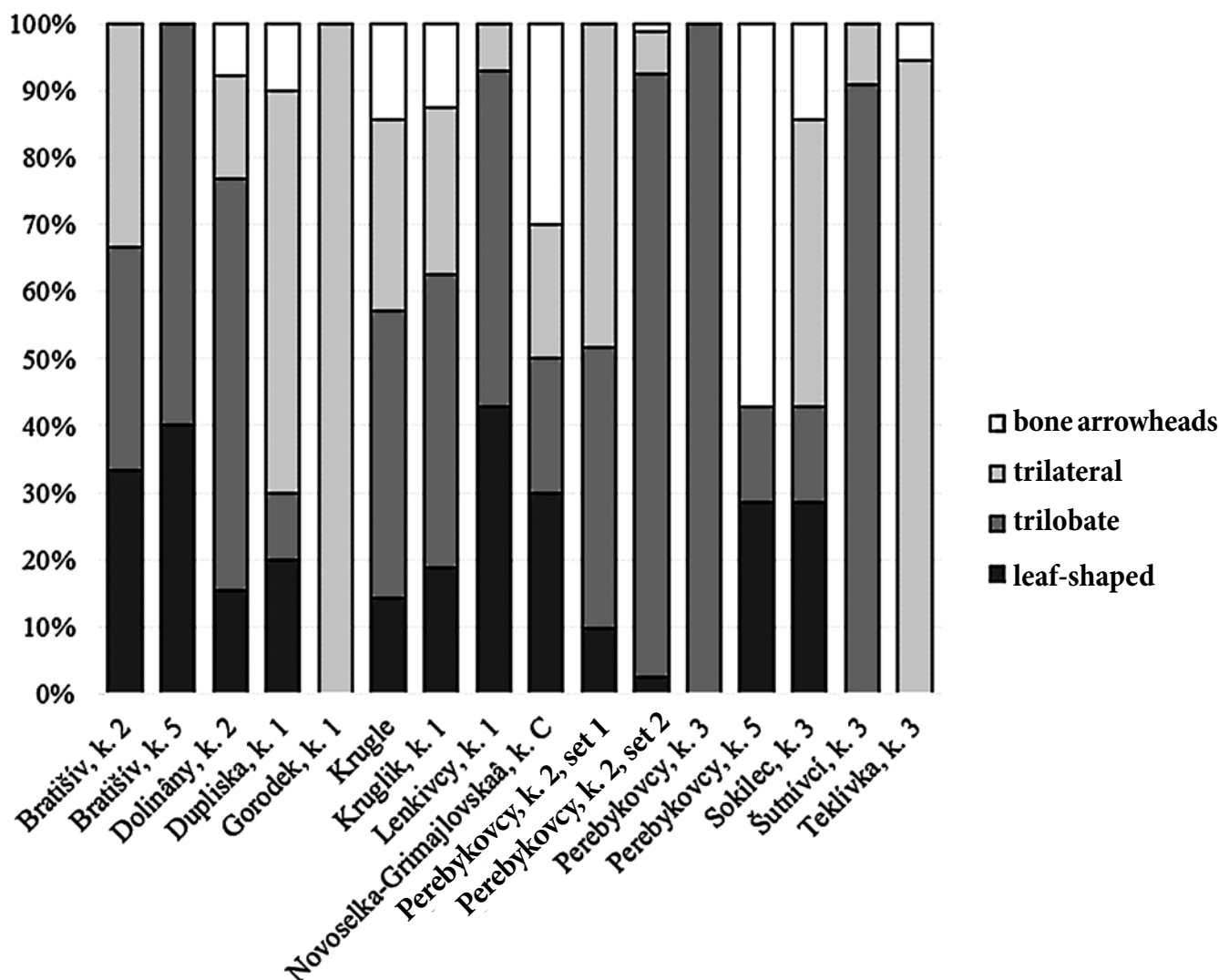


Fig. 4. Frequency of particular forms of arrowheads in the selected quivers sets of the West Podolian group of RSK (the collation included by the sets consisting of at least 5 arrowheads) (according to table 1)

Ryc. 4. Frekwencja występowania poszczególnych form grocików strzał w wybranych zespołach kołczanowych zachodniopodolskiej grupy RSK (w zestawieniu uwzględniono zestawy liczące co najmniej 5 grocików strzał) (wg tabeli 1)

Trilobate arrowheads are represented mainly by a group of artefacts of a sharp leaf-shaped point with the low placed largest width of the point type II-2 according to the already mentioned classification (136 copies). More than 3.5 times less frequently (36 copies) were the copies of type II-1 with laurel-shaped points and a distinct socket with a barb or without it (respectively options II-1-1 and II-1-2), rarely with an indistinct socket (option II-1-3). Even more rarely (18 copies) there were copies of a massive point with arched edges and the largest width placed at its base with a shorter or longer socket type II-3. As in the case of leaf-shaped arrowheads, the trilobate items included the artefacts made of iron – one arrowhead of type II-2 was made of this raw material. A characteristic feature of both leaf-shaped and trilobate arrowheads is a relative frequent occurrence of barbs on sockets.

The largest group regarding all forms of metal arrowheads found in burial complexes in the West Podolian group of RSK is the collection of trilobate items of type III-2 of elongated, triangular in cross-section point and a distinct

socket. Its frequency is at a similar level (137 copies) as the second most numerous group of trilobate arrowheads type II-2 (136 copies). Trilobate items of leaf-shaped points and a distinct socket type III-1 were 6.5 times less frequently (21 copies). In addition, considering a set of trilobate arrowheads it is possible to include a group of 19 combined arrowheads (coming from a quiver set No. 1 from the barrow No. 2 in the village Perebykivci) with two sides of the point, formed in the shape of the edges, and the one in the shape of wings. Regarding the trilobate artefacts there are no copies made of iron.

Apart from the metal (bronze and iron) artefacts in the first chronological group, there are also arrowheads of quadrangular or circular cross-section. With regard to the quiver sets of the West Podolian group of RSK, bone arrowheads with a quadrangular cross-section (17 copies) predominated. However, bone arrowheads of circular cross section are rare – only 2 items have been discovered (10.5% of all 19 bone arrowheads of certain form) coming from one quiver set.

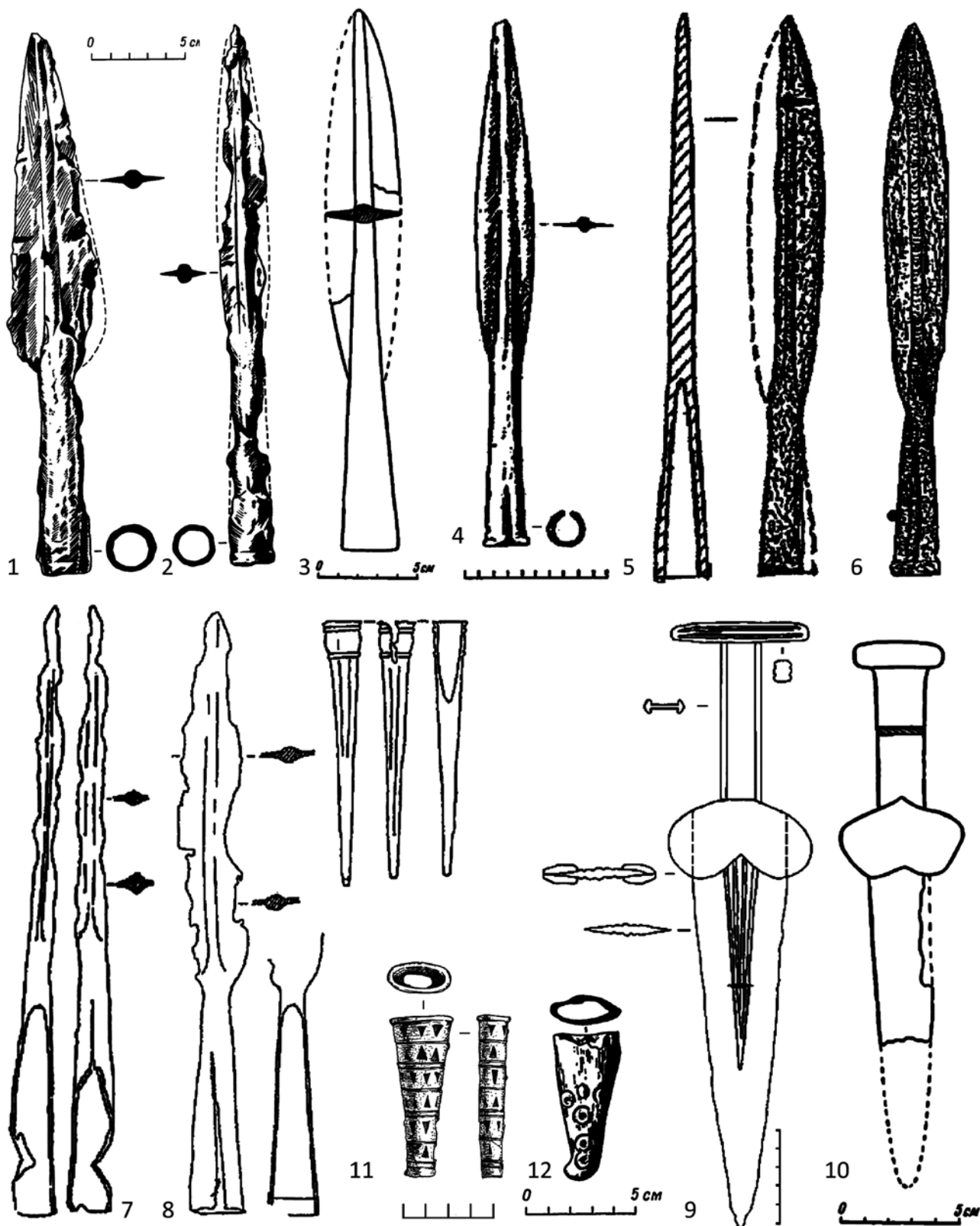


Fig. 5. Spearheads and the butt of the spear (1–8), daggers (9–10) and bindings of sheath of daggers and swords (?) (11–12) coming from the burial complexes of the West Podolian group of RSK. 1–2 – Perebykivci, k. 2; 3, 10 – Lenkivcy, k. 1; 4 – Kruglik, k. 1; 5 – Šutnivci, k. 1; 6 – Šutnivci, k. 3; 7 – Bratišiv (Bratysšov), k. 2; 8 – Bratišiv (Bratysšov), k. 5; 9 – Sokirnicy, from the destroyed barrow; 11 – Švajkivci, k. 1; 12 – Perebikivcy k. 5. 1–2, 5–8 – no scale. (1–2, 12 – by G. I. Smirnova 1979; 3, 10 – by A. I. Melúkova 1953; 4 – by G. I. Smirnova 19935–6 – by A. F. Gucel et al. 1998; 7–8 – by M. Bandrivs'kij 2010; 9 – by A. Mogilov 2010; 11 – by M. Bandrivs'kij 2009a)

Ryc. 5. Groty i tok włóczni (1–8), sztylety (9–10) i okucia pochew sztyletów i mieczy (?) (11–12) z zespołów grobowych zachodniopodolskiej grupy KWS. 1–2 – Perebykivci, k. 2; 3, 10 – Lenkivcy, k. 1; 4 – Kruglik, k. 1; 5 – Šutnivci, k. 1; 6 – Šutnivci, k. 3; 7 – Bratišiv (Bratysšov), k. 2; 8 – Bratišiv (Bratysšov), k. 5; 9 – Sokirnicy, ze zniszczonego kurhanu; 11 – Švajkivci, k. 1; 12 – Perebikivcy, k. 5. 1–2, 5–8 – bez skali. (1–2, 12 – wg G. I. Smirnova 1979; 3, 10 – wg A. I. Melúkova 1953; 4 – wg G. I. Smirnova 19935–6 – wg A. F. Gucel et al. 1998; 7–8 – wg M. Bandrivs'kij 2010; 9 – wg A. Mogilov 2010; 11 – wg M. Bandrivs'kij 2009a)

The second largest military group, apart from arrowheads of the burial complexes affiliated to the West Podolian group of RSK, are spear points. The weapon of this kind was generally used for unarmed combat, although it was also possible to throw towards the opponent (A. I. Melúková 1964, p. 35; V. Gricuk 2009, p. 65–68, Fig. 8.3). Spearheads have been found in 11 burials. They usually occur individually. Only in the barrow No. 2 in Perebykivci there were two spearheads in one burial complex (Fig. 5: 1–2). In the barrow No. 5 in Bratišiv there was a spearhead with an iron spear butt (i.e. the fitting of the lower end of the shaft) (Fig. 5: 8). The distance between the two elements was about 3.5 meters, which according to T. Sulimirski (1936, p. 57) provides the length of the whole artefact. The matter of the length of the discussed spear will be taken later in the work.

The spears coming from the analyzed cultural groups show high similarity in terms of morphology. They are all laurel-shaped and they differ in details. According to the classification of A. I. Melúková (1964, p. 36), the spears can be included to the group first, which differentiator is the laurel shape of the leaf.

The vast majority of analyzed spears (11, representing 91.7% of all spears) have a wide stem located medially on the leaf and smoothly transferring into the socket (Fig. 5: 1, 3–8). The spearheads of such forms according to the mentioned classification can be enumerated into the first type (*ibidem*, p. 36). The cross-section of the stem is generally circular, less common oval although there are the items in which the stem has a quadrangular cross section (diamond). In addition to the morphology, the common element of all items are of small dimensions, varying between 26.4 and 38 cm (average 31.1 cm). The rate of the socket length to the point ranges between 1: 1.2 and 1: 2.2. The distinctive feature of the spearhead from the barrow No. 9 in Kolodivka is the presence of an octagonal socket. Such a socket shape is not typical for the Scythian environment (see. A. I. Melúková 1964, pp. 35–46, Table 12–13, 14: 1–11). On the other hand, a similar shape of the socket has the already mentioned lower spear butt coming from the barrow No. 2 in Bratišiv.

The second spearhead, coming from barrow No. 2 in Perebykivci (Fig. 5: 2), represents a different type. Its relatively narrow point and the stem not transferring into the socket allows us to classify it as the type 2 within the first group of spearheads by A. I. Melúková (1964, pp. 36–37). In terms of the metric features, it is partially similar to spearheads type 1 (its length – 29.2 cm, the ratio of the socket to the point – 1: 1.3), and it differs only considering the maximum width of 2.75 cm, which is more than 1.5 times smaller than the average maximum width of the spearhead blade of type 1, having approximately 4.2 cm.

The chronology of both of the above types of the laurel-shaped spearheads is slightly different – the items of type 1 A. I. Melúková refers to the seventh-sixth century BC, while the copies of type 2, she dates from the beginning of sixth-fifth century BC (A. I. Melúková 1964, pp. 36, 37–38). In recent chronological designations, the complexes with spearheads type 2 appeared already in the seventh century BC (e.g. Makeevka, k. 453 – I. N. Medvedskaâ 1992, Table p. 90–91).

Returning to the issue of the spear length from the barrow Bratišiva, its value of 3.5 m estimated by T. Sulimirski, according to A. I. Melúková (1964, p. 43) seems to be much

exaggerated and it can result from accidental arrangement of both these items in the grave. According to this researcher, a standard length of the Scythian spear did not exceed 2.2 m in length. While the opposite view represents E. V. Černenko (1984), which allows for the existence of such long spears by the Scythians, linking them with the group of long „assaulting” spears in the type of pikes. However, it should be noted, that the data collected by that researcher refers to the finds of the fourth century BC so it is clearly younger than the burial from the barrow No. 5 Bratišiv. What is more, the discussed funerary complex shows the signs of robbery. To conclude provided hints, it seems that A. I. Melúková was right. With a certain degree of probability we can assume that spear shafts were originally broken and their individual parts were arranged at a distance from each other.

Cutting weapons coming from the burial complexes of the West Podolian group of RSK⁴ is represented by three daggers – the acinaces type (Fig. 5: 9–10). Two of them (discovered in the barrow No. 1 in Lenkovce and the barrow No. 1 in Myškovce) survived in fragments, while the third artefact, found in the ploughed, stone-earth barrow in the village Sokirnica on Tarnopol land, preserved in its entirety. This last item of an overall length of 32.5 cm, has a short (18.5 cm long), triangular blade decorated at the base by means of triangular concentric engraved lines and a hilt with a whetstone-shaped pommel and a kidney-shaped crossguard (Fig. 5: 9). Details of this hilt allow us to classify the analyzed remain to the first subtype of the first type according to the typology of A. I. Melúková (1964, p. 47). However, the dagger from Lenkivcy has an ingot-shaped pommel and a massive butterfly-shaped guard and a triangular, symmetrically narrowing blade (Fig. 5: 10). Thus, this item may be classified as the second subtype of the first type in the above-quoted classification (*ibidem*, p. 49). The artefact from Myškovcy survived in a significantly worse condition, which according to Ju. N. Maleeva (1991, p. 125) is the result of undergoing high-temperature burning of the entire inventory. The condition of this item makes it impossible to assign it to a specific type of daggers and swords within existing classifications.

In addition to the funerary finds uncovered within the discussed group, there are also some daggers which are isolated finds. With regard to morphology, loose finds of daggers are represented by different forms. The dagger from the village Nelipivcy has an oval pommel, butterfly-shaped guard and a broken blade with a parallel course of the edge (A. Mogilov 2010, Fig. 12: 1). This item combines the elements typical for different types of the classification by A. I. Melúková, that is why it is difficult to find its close analogies. Thus, it is impossible to establish its precise dating, but it seems that it should not go beyond the Archaic period, or the beginning of the Middle Scythian period (*ibidem*, pp. 120–122).

⁴ D. A. Topal (2014, p. 104, Fig. 1) – he ranks daggers from the West Podolian RSK group into the so-called Middle Dniester subgroup (Bukovina) of Carpatho-Dniester group of the blade weapons, located on the western borders of Scythia. Apart from the finds coming from the range of this discussed cultural group, representing the north areas of the Bukovina subgroup, within its range it was possible to find blade weapons in the Scythian type from the areas in south Bukovina (now within the boundaries of Romania).

Undoubtedly the most original form of all the daggers coming from the area of this group is a bronze dagger uncovered in the village Ruskie Folwarki. This artefact has a triangular blade with a plastically formed stem and a hilt with a guard in the form of a butterfly's open wings and a simple ingot-shaped (beam-shaped) pommel. The grip is decorated on both sides by means of a vertical range of arcs directed upwards (T. Sulimirski 1936, p. 102, Table IX, 1a–b; A. Gawlik 2004 Fig. 1: 1). Cultural affiliation of this artefact has aroused some doubts since its discovery. T. Sulimirski (1936, p. 20) considered it as the remain of Scythian origin. M. Bandrivskij (1994, p. 126, Fig. 38, 3) and L. I. Krušel'nicka (1998, pp. 199–200, Fig. 1, 7) joined it in turn with the Cimmerian horizon dating it to the end of eighth – the beginning of the seventh century BC in case of Bandrivskij and eighth century BC by Krušel'nicka. Anna Gawlik (2004, pp. 164–166) considered the item from Ruskie Folwarki as an article of Asian origin (Central Asia) belonging to the bronze daggers group of so-called Siberian type or a local imitation of this form of daggers. In terms of chronology, the researcher connects it with the oldest stages of the „Scythian culture” associated with the so-called Gumarovo horizon coming from the end of the eighth-seventh (the turn of the eighth/ seventh) centuries BC, when there were clear links with its Asian cradle (*ibidem*, p. 166). The Central Asian (Western Siberian) origin of this artefact is also accepted by J. Chochorowski (2014, p. 19, fig. 10, 19) by including this item in the context of the objects of Western Siberian origin in Central Europe mainly related to the environment of the Tagar culture.

In addition to the above-described daggers, a larger frequency of cutting weapon finds in the burial complexes of the West Podolian group of RSK is also proved due to the discovery the fitting components of the scabbard in some parts of complexes of that group, so-called chapes which are the lower finials of the sheaths (Fig. 5: 11–12). The items interpreted as chapes of scabbards were found in two complexes – the barrow No. 1 from the village Švajkivci and the barrow No. 5 in Perebykivci. Both artefacts represent different types of fittings. The chape found under the barrow mound No. 5 in Perebykivci was made of bone (Fig. 5: 12). The interior was hollowed in such a way that it was possible to attach the scabbard made of any organic material (wood covered by the leather – see A. I. Melūkova 1964, pp. 60–64). The very final part took the form of a triangle ended with the stylized bird head with a single eye in the form of a carved circle with a dot in the middle. Additional four circles with concentric dots were located in the lower part of the body of the triangular object (G. I. Smirnova 1979, p. 57). For this object it is not possible to identify any close analogy. G. I. Smirnova (1979, p. 57) as the nearest equivalent of this chape from Perebykivci mentions the discovery of the barrow at Staršaja Mogila, although it seems that the closer analogy is a stylized bird head presented on the fitting of the dagger scabbard coming from the barrow No. 2 at Rephjahtova Mogila (V. A. Il'inskaâ, B. N. Mozolevskij, A. I. Terenožkin 1980, p. 41–42, Fig. 11: 7; 12: 2)⁵.

⁵ It should be noted that regarding the form of the chape of the dagger scabbard (?) coming from the barrow No. 5 in Perebykivci, it fits in with one of the Early Scythian zoomorphological stylistic style for which the distinctive feature is decorating objects with the heads

The second fitting of the scabbard (unless it was a very final part of a spearhead – see e.g. G. Marinescu, 1984, p. 49, 75, Fig. 5; T. Kemenczei 2009, p. 38–39) found in the barrow No. 1 near the town Švajkovec had the form of a bronze sleeve of a trapezoid (conical) shape decorated with six rows of triangular holes separated by horizontal lines – grooves (Fig. 5: 11). It is possible that this object had been originally gilded (M. Bandrivskij 2009, p. 207). This artefact does not also have exact counterparts – its closest analogies should be found in fittings series of a conical form decorated with openwork, triangular incisions coming from the Carpathian Basin and Transylvania. These objects differ from each other taking into account the secondary features (G. Marinescu, 1984, Fig. 5: 9; A. Vulpe 1990, Table 31, 205; M. Bandrivskij 2009, p. 207; 2011, p. 61–62; T. Kemenczei 2009, Table 187: 3).

The signs of looting in the barrow No. 5 in Perebykivci suggest that the swords and daggers located primarily in the scabbards finished chapes might have been taken out from the burial by grave robbers.

One of the most frequently encountered offensive weapon in burial complexes of the West Podolian group of RSK is the category intended for hand-to-hand combat i.e. all kinds of battle axes (Fig. 6). This type of weaponry was uncovered in eight complexes (16.3% of burials with weapons), which brought ten items of blunt weapon. Battle axes in burial complexes are single, and only in two cases there were two different forms of battle axes recorded in one burial (Perebykivci, k. 2; Švajkivci). In terms of form and function, the battle axes occurring within the range of the analyzed cultural group can be divided into two main types – massive, wedge-shaped battle axes and axe-hammers. The ratio of the two forms is 1: 4 in favour of axe-hammers.

The massive wedge-shaped battle axes (Fig. 6: 1–2) were discovered in two burial complexes, but in both cases they were accompanied by axe-hammers. The discussed battle axes have been called by V. A. Illins'kaâ „wedge-shaped axes” referring to I type of the classification presented by the researcher (V. A. Illins'kaâ 1961, p. 31–33). The presence of a notch in the base of the axes in both West Podolian items allows us to affiliate them to the more detailed subtype 2 (I-2) presented in the mentioned classification for which the distinguishing feature is the presence of such a constructive element. Analogous battle axes are typical for burial complexes of the forest-steppe Dnieperland located on the left bank dated to the phases of RSK-2 and RSK-3 (Luka; Popovka, Staršaja Mogila – V. A. Illins'kaâ 1961; I. N. Medvedskaâ 1992; O. V. Šelehan' 2012).

of birds of prey and rams, or they combine features of these animals. Items made in such style are, first of all, the elements of horse tack, mainly strap junctions, and to a lesser extent, cheek pieces (the upper end) and as well as lower fittings (chapes) of the cutting weapon scabbards, just as it took place in the case of the discussed object (e.g. A. I. Ivantchik 2001, Fig. 34, 4–9; 35; A. Mogilov 2008, Fig. 40, 5–18; 41–43; 56, 1–27; 129; 130, 1–9). The items made in this style are also known from the West Podolian group of RSK and they are represented primarily by elements of horse tack (bronze straps and bone finials of cheek pieces – A. Mogilov 2003, Fig. 1, 14–16; M. Bandrivskij 2010, pp. 145–151, Fig. 2, 3). In terms of chronology, they are associated mainly with complexes dated back to the late seventh-early sixth century BC (I. N. Medvedskaâ 1992, p. 87n., Table pp. 90–91; A. Mogilov 2008, pp. 68, 69, 71).

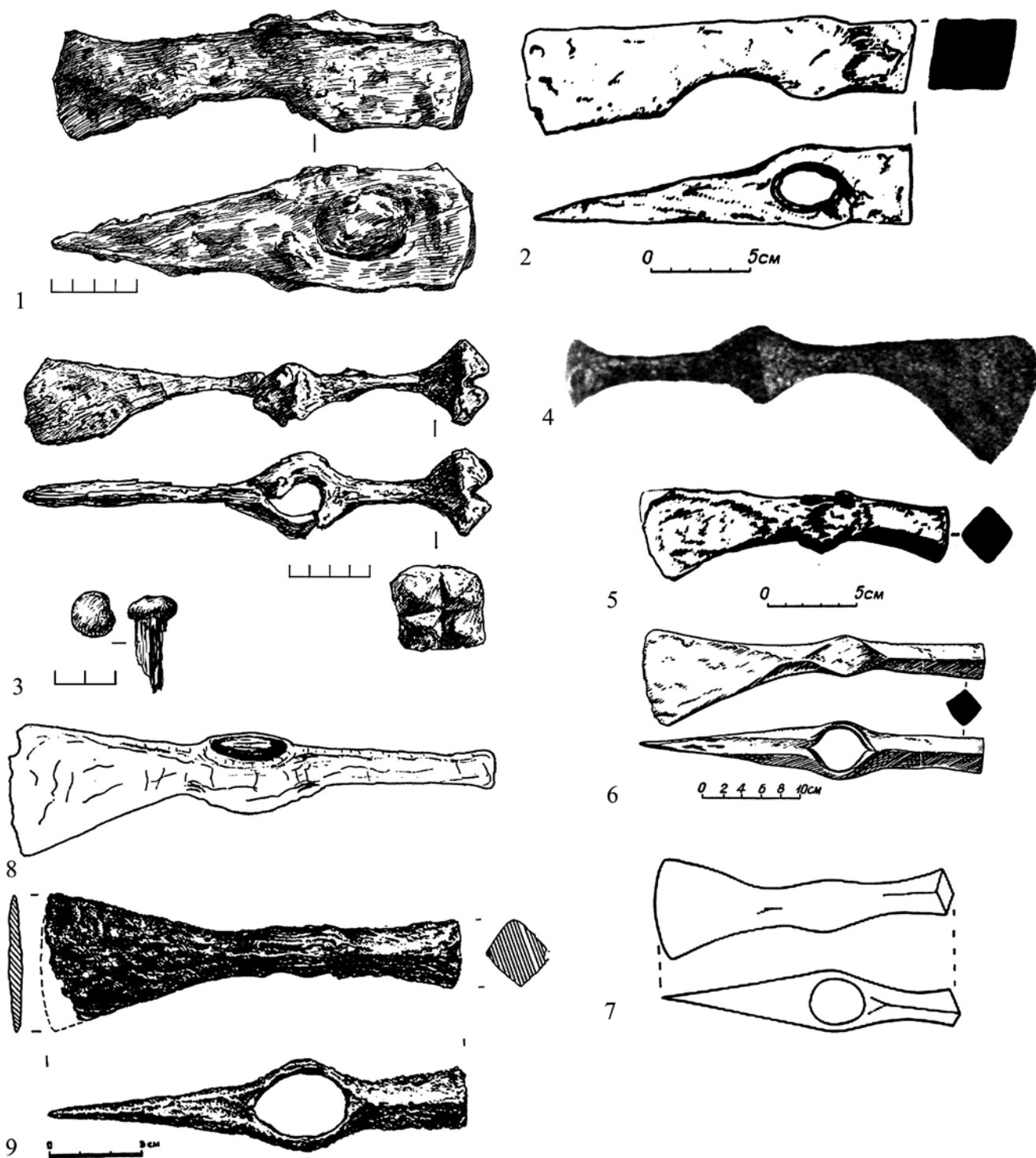


Fig. 6. Blunt weapon coming from burial complexes of the West Podolian group of RSK. 1, 3 – Švajkivci, k. 1; 2, 5 – Perebikivcy, k. 2; 4 – Dupliska, k. 1; 6 – Kruglik, k. 1; 7 – Lenkivcy, k. 1; 8 – Novoselka-Grimajlovskaa (Nowosiółka Grzymałowska); 9 – Bikiv (Byków), k. 1. 4, 7–8 – no scale. (1, 3 – by M. Bandrivs'kij 2009a; 2, 5 – by G. I. Smirnova 1979; 4 – by T. Sulimirski 1936; 6–7 – by G. I. Smirnova 1993; 8 – by M. Bandrivs'kij 2010; 9 – by J. Mahnik, D. Pavliv, V. Petegirič 2003)

Ryc. 6. Broń obuchowa z zespołów grobowych zachodniopodolskiej grupy RSK. 1, 3 – Švajkivci, k. 1; 2, 5 – Perebikivcy, k. 2; 4 – Dupliska, k. 1; 6 – Kruglik, k. 1; 7 – Lenkivcy, k. 1; 8 – Novoselka-Grimajlovskaa (Nowosiółka Grzymałowska); 9 – Bikiv (Byków), k. 1. 4, 7–8 – bez skali. (1, 3 – wg M. Bandrivs'kij 2009a; 2, 5 – wg G. I. Smirnova 1979; 4 – wg T. Sulimirski 1936; 6–7 – wg G. I. Smirnova 1993; 8 – wg M. Bandrivs'kij 2010; 9 – wg J. Mahnik, D. Pavliv, V. Petegirič 2003)

Axe-hammers are much more often than the wedge battle axes in the West Podolian burials of RSK. These items occurred in eight burial complexes. Regarding the already cited classification by V. A. Il'inskaâ (1961, p. 36–43), the axe-hammers have been assigned to Group III collecting together the so-called „axe-hammers”, whereas regarding the classification of A. I. Melûkova (1964, pp. 66–67), these objects have been assigned to group II of battle axes collecting together „axe-hammers with a long, narrow butt”. On the other hand, in the recent work of O. V. Šelehan (2012, p. 5) the analyzed type of battle axe was qualified for the type II.1 collecting thin axes (battle axes) with a straight leading edge.

The axe-hammers are internally fairly diverse forms of battle axes with different sizes, proportions, widths of blade, form of side cheeks or butts. V. A. Il'inskaâ (1961, p. 36) has mentioned three basic groups of axe-hammers: 1) arched; 2) with a non-symmetrical blade, 3) with a symmetrical blade⁶. Considering the West Podolian complexes there are the last two subtypes. However, there are not arched axe-hammers among them, which seem to have a younger chronology that go beyond the chronology of the West Podolian group of RSK – by A. Šelehana (2012, p. 6, 7) this form (in his terms – type II.2) appears in the middle of the sixth century BC.

The axe-hammers with asymmetrical blades, in the analyzed set, are represented by five items (Fig. 6: 3–7). Their common feature is a straight top edge and the blade, which its upper edge is asymmetrical with respect to the bottom part. Moreover, a common feature for all the five axe-hammers is also a quadrilateral shape of the butt. Individual copies are different regarding their dimensions, shapes and forms of the cheek side and shapes of the blade. Due to the last two elements, as for the West Podolian axe-hammers with an asymmetric blade it is possible to distinguish two variants. The first of these is represented by the artefacts from burial mounds in Švajkijci and Dupliska, with a relatively broad blade, whose lower part is firmly lowered down forming a beard (Fig. 6: 3–4). In both cases, the cheek is significantly expanded and has short but clearly marked side lugs, while the butts are ended with quadrangular, expanding hammers. In addition, the hammer part of the axe-hammer from Švajkijci has 4 small pyramids. The use of this last element at the hammer had a functional value, because the placement of the pyramids, by M. Bandriwskij (2009a, p. 207) „weakened the effect of „slippage” in case of hitting the object. On the other hand, the presence of such a structural element meant that the penetration force was greater than in the case of a flat-ended hammer – in the case of adding four pyramids to a simple hammer, the number of points of impact surface increased from one (a flat hammer) to four. For such a method of butt shaping, there is no analogy in both the Scythian environment and beyond it⁷.

⁶ A. I. Melûkova (1964, pp. 66–67) distinguishes only two basic types of axe-hammers, and the type I collects the items grouped by V. A. Il'inskaâ within the subtypes 2 and 3 in group III, which are axe-hammers with a straight body, while type II is identical with the subtype 1 of group III collecting the items with arched bodies.

⁷ As the only one, and moreover, quite distant analogy shaping the butt with the use of lugs/projections, it is possible to mention one of the „war pick hammers / horseman's pick”, coming from the Taman Peninsula and stored in the collections of the Museum of the History

The second variant of axe-hammers with an asymmetrical blade are represented by the items from the villages: Lenkivcy, Kruglik and Perebikivcy (Fig. 6: 5–7). All three objects have a diamond-shaped extended blade, a square, flat-tipped hammer and a slightly expanding side cheek without clear lugs. The artefacts coming from Lenkivcy and Perebikivcy are quite thick and massive, while the axe from Kruglik is more thin.

The axe-hammers with a symmetrical blade (subtype III/3 by Il'inskaâ – 1961, p. 36, 38) are represented by the items from Bikivand Nowosiółka Grzymałowska (Fig. 6: 8–9). The artefact included in this group has a blade which upper and lower edges which are symmetrical to one another and a quadrangular ended butt, as in the case of the above-mentioned axe-hammers with an asymmetric blade, with an expanding hammer. The butt of the axe-hammer from Nowosiółka Grzymałowska is slightly lowered down in relation to the blade.

In addition to the funerary finds from the West-Podolian group of RSK there is also a loose, isolated find of the axe-hammer from Satanów (A. Mogilov 2010, Fig. 13: 1). In terms of morphology, the artefact is similar to the second variant of the axe-hammers group with an asymmetric blade. It differs from them considering details (such as a circular in cross-section butt, lack of lugs on the side cheeks).

Both types of axe-hammers coming from the range of analyzed cultural groups, just as it was in the case of wedge-shaped battle axes, they have more or less strict analogies (e.g. variant 1 of the subtype 2 of axe-hammers – Aksûtincy, k. 5 (studies by Ā. D. Samokvasova); Repjahtova Mogila, p. 2; variant 2 of the subtype 2 of axe-hammers – Aksûtincy, k. 5 (studies by S. A. Mazaraki); Vovkivcy, k. 12; the axe-hammers of the subtype 3 – Skorobor, k. 1) in the Early Scythian complexes of the phases RSK-2 and RSK-3 of the right-bank and left-bank of the Middle Dnieperland (V. A. Il'inskaâ 1961, V. A. Il'inskaâ, B. N. Mozolevskij, A. I. Terenožkin 1980; I. N. Medvedskaâ 1992; O. V. Šelehan 2012). However, it is more difficult to indicate their close analogies in burial complexes with the Scythian elements from the Caucasian area (cf. S. A. Esaân, M. N. Pogrebova 1985 Table. XI, XII), which may indicate that the origin of the West Podolian axe-hammers must be combined with a zone of the Middle Dnieperland.

The hafting process of the West Podolian blunt weapons can be found with regard to the artefact from Švajkijci. The axe found here was preserved with a wooden handle 60 cm long. Taking into account the fact that the average length of the handle of the Scythian blunt weapon was approximately similar to the length of an adult hand (V. A. Il'inskaâ 1961, p. 42), it can be assumed that the handle of this axe-hammer is preserved in its larger parts. Iconographic images (images of battle axes on anthropomorphic stone steles and metal vessels – e.g. V. A. Il'inskaâ 1961, Fig. 8, 9; V. S. Ol'hovskij,

of Weapons in Zaporozhye (V. Ū. Murzin, V. G. Šlajfer 2008, p. 51, fig. 3: 3, 7). The noted butt was formed into a hammer implemented by two lugs in the form of a flattened, rounded pyramids. The whole hammer was decorated with geometrical incised ornament on the sides in the form of inscribed (one into the other) four right angles. The blade of this pick hammer took the form of a dagger. Both the butt, and the blade of the artefact were lowered down in relation to the handle. The researchers date back the artefact within the range the seventh – first half of sixth century BC (*ibidem*, p. 51).

Table 2

**Quantitative and metric characteristics of the elements regarding body armour
coming from the burial complexes of the West Podolian group of RSK**

Tabela 2

**Charakterystyka ilościowa i metryczna elementów uzbrojenia ochronnego
z zespołów grobowych zachodniopodolskiej grupy RSK**

complex	armour		combat belts		notice
	quantity	measurement (in cm)	quantity	measurement (in cm)	
Dolinány, k. 2	> 150	1,4–1,7×5–2,6	no info.	5,3×1,6	–
Dolinány, k. 2	11	no info.	–	–	–
Novoselka- -Grimajlovskaâ, k. A	14	no info.	–	–	–
Sirvatinci, k. 2	> 20	no info.	–	–	–
Spasivka, k. 1	> 350	1. 2,6×1,5 (>350); 2. 2,6×4,6 (>5)	–	–	–
Šutnivci, k. 3	70	no info.	–	–	62 bronze and 8 iron items
Švajkivci, set 1	about 1,2–1,3 thousand	1. 2,6×1,7–2; 2. 2,5–2,6×1,4–1,5; 3. 2,2×1,2; 4. 1,9×1	9	9×1,5–1,9	there was a bronze strap clamp (?), a bone button and 5 small bone clasps (?) among scales
Švajkivci, set 2	no info	no info	25	no info	full armour set transported to Lvov as a soil block; a bone clasp found among scales
Švajkivci, set 3	about 4,5–5 thousand	no info	27	9,9–10,9×1,6–1,7	–

G. L. Evdokimov 1994, Table 16) show that generally the upper part of the straight handle slightly protruded from the axe head. In addition, in some cases, setting the handle in the eye of the axe, fixed by means of the use of various types of wedges. The presence of such elements was also observed in the already mentioned axe from Švajkivci – this object, found among the remains of the wood in the eye, was in the form of the wedge with a length of 3.2 cm ended by the mushroom-shaped head (M. Bandrivskij 2009a, pp. 206–207) (Fig. 6: 3). It should also be noted that under the handle of this axe-hammer there were the remains of a leather object, probably the case where this weapon was carried (*ibidem*, p. 206). The previously noted iconographic images (anthropomorphic stone steles) indicate that axe-hammers and battle axes were worn as hung from a belt or tucked into the belt, its right side (V. S. Ol'hovskij, G. L. Evdokimov 1994, p. 71).

Considering the seven complexes (14% of all burials with weapons – Table 2) of the West Podolian group of RSK, the presence of the elements of body armour have been revealed. The relatively large role of this type of objects in the environment of the West Podolian group of RSK was indicated by means of the discovery of iron plates (scales) of armour from the Middle Dniester basin, stored in the collections of the Museum of National History in Chernihiv (A. Mogilov 2010, p. 122, Fig. 12: 2).

Undoubtedly, the most spectacular find with regard to elements of armour comes from the barrow from Švajkovce. In the barrow the researchers discovered three (two?) armoured sets, which consisted of several thousands of iron scales scattered over an area of over 8 m² (4.1 × 2.1 m). These artefact are characterized by a relatively good state of preservation, which

undoubtedly resulted from the covering layer of sediments that entered the interior of the burial chamber due to leaving it open for a long time. These covering layers of sediments saved the deposited sepulchral artefacts (including armours), not only from the activities of grave robbers (?) but also from the collapse of the stone ceiling erected over the burial chamber. As a result, the armour has been preserved in a complete state, which allowed us to reconstruct them. The first set, probably initially hung on a wooden pole, was made up of more than a thousand iron scales, three – of 4.5–5 thousand items. The second set was cut as a block of earth and transported to Lvov, in order to examine closely as *in situ* state (M. Bandrivskij 2009a, pp. 207–208). In the case of other armour finds (their components) a much smaller number of metal scales – from 11–14 to 150–350 were uncovered. However, it is necessary to remember that most of these complexes bear the traces of grave robbers, for whom undoubtedly the armour was attractive loot. On the other hand, the number of plates depended on the type and dimensions of the scale armour. The size of plates was also significant (S. V. Černenko 1968, p. 26).

In most cases, the scales were made of iron, only in one case (Šutnivci, k. 3) the researchers noticed the presence of iron and bronze plates – their rate was from 8 to 62. In formal terms, almost all the metal scales coming from the armour represented the same type (Fig. 7: 1a–e, 2, 3a–b) – they were rectangular plates with more or less rounded bottom affiliated by S. V. Černenko (1968, p. 27) to the type 1 of scales in that way that they covered the body of a warrior. Additionally, in some cases (Spasivka, k. 1) the plates had cut upper ends. In the profile they were slightly bent in the central part, which allowed the scales to overlap one upon another. For fix-

ing scales the holes were used, usually four, but three of them were in the upper part (its short edge), and the fourth hole – in the longer edge. Sizes of plates were varied, wherein one set could include plates in different sizes. This procedure was aimed at ensuring the maximum flexibility of the armour – the plates smaller in size were placed in the abdominal and lumbar regions, as well as the shoulder and elbow joints, so in the most mobile areas of the upper part of the human body (S. V. Černenko 1968, p. 28). In most cases, the West Podolian scales of armour were not decorated. Only some, larger ornamented plates of the armour from the burial No. 1 in Spasivki, were placed along the bottom edge (with the tiny points impressed by the use of punch (?)).

Metal scales were combined with each other and fixed to the leather base generally by means of straps or tendons, which were threaded through holes in the plate. Within the West Podolian group of RSK there are also known cases of joining the plates to each other by a wire (the find of an undefined location of the Middle Dniester basin) or riveted (in warm?) (Serwatyńce, k. 2). Some of the armour scales were uncovered in larger groups – and their arrangement indicated that the plates were fitted to the base of armour by means of horizontal rows from the bottom to the top in such a way that each top row, approximately 1/3 – 2/3 of the length of plate overlapped the plate located below. Each scale in the row overlapped on the neighbouring one, about a half of its width, and there were two possible sets of attachment of plates to the base – the right or the left (the right edge of one plate covered the left edge of the neighbouring one in the first case, or vice versa – in the second case). The arrangement of holes on the scales and the preserved groups of plates indicate the use of both systems in the course of manufacture of the West Podolian armour. In addition, all subsequent top row of scales was slightly shifted with respect to the lower so that the top plate covered the site of contact point between the two scales of the lower row. Such a system of scales meant that the armour was not only strong (it comprised the layer of 2–4 plates), but also flexible (cf. S. V. Černenko 1968, p. 31–32). The individual elements of armour were linked together using leather straps, with strung bone or metal strap clamps – one bronze clamp, five bone clamps and a bone clasp were found among the scales of the first set of the armour in the barrow in the vicinity of the village Švajkivci.

As already mentioned, only in the case of armour from the village Švajkivci its state of preservation allows them to reconstruct (M. Bandriv'skij 2009a, Fig. 4). One of them is reconstructed as a short slipover (waistcoat) protecting the chest, back and abdomen (Fig. 7: 4a). S. V. Černenko affiliates similar armour (1963, p. 39; 2006, p. 18–19) to a group of armour-breastplates. The armour of this type is known e.g. from the Early Scythian complexes from the area of the forest-steppe Dnieperland (S. V. Černenko 1968, Fig. 18, 19; 2006, Table I: 13; 4: 82). The second set of armour, dated to the already mentioned funerary complex, is reconstructed as the armour so-called „Oplečem” in the nomenclature of S. V. Černenko (1968, p. 42; 2006, pp. 20–21, Fig. 6), which is strengthening the shoulders (Fig. 7: 4b). For this type of armour, known *inter alia* from the images on a gold comb from the barrow in Soloha, the distinguishing element is the presence of the distinctive shoulder part in the form of two strips

cut out of the dorsal and trimmed at the edges with the leather tape. Both strips are separated by a circular collar cut (a hole for the head). These strips, covering the shoulders overlap slightly on the upper part of the frontal armour, combining it with a back part in such a way that the warrior's chest is protected by a double layer of armour. The armour of this type is not too often encountered. The known items come from the complexes linked to the Middle Scythian period (sixth – fifth century BC) and therefore they are younger than the armour of the village Švajkivci (S. V. Černenko 2006, p. 38, Table 5: 99, pp. 54, Table 16: 271).

In addition to the metal armour there were probably in use the armour made of leather designed as a form leather jackets-slipovers (S. V. Černenko 1968, pp. 13–15; 2006, pp. 5–6). This type of light armour, easy to make, could serve as the protection against arrows and weaken the impact of the sword or spear. The fact that these objects were made from organic material such as the skin caused that the leather armour in most cases have not survived to our times. It makes that it is not only difficult to draw proper conclusions about its appearance but also it makes it impossible to clearly determine whether the deceased was equipped with this type of armour. The appearance of leather armour is proved due to its images on stone anthropomorphic steles and toreutics objects.

Much less frequently than the armour are represented combat belts (trimmed with metal scales) with regard to the materials of this cultural group. Components of such belts, in the form of iron elongate rectangular plates (width to length ratio approx. 1: 5–6) with the characteristically formed, s-shaped profile with the holes arranged at the short side of the edges (Fig. 7: 1f) were uncovered in two burial complexes (Dolinâny, k. 2; Švajkivci, armour sets 1–3) (Table 2). In both cases, the belts accompanied the scale armour sets. The number of plates, which trimmed the leather belts was much smaller than the number of scales forming armour (which is not surprising), and it amounted from 9 to 27. Obviously, the number of discovered metal belts, just as it was in the case of scales used for the armour, does not necessarily be unambiguous with its original amount.

Considering 11 burials (22% of complexes with weaponry) there were also elements of horse tack. In most cases, these were iron bits, less frequently iron and bone cheek pieces and bone and bronze strap junctions. It should also be noted that the burials with at least two elements of weapons have been found with at least two iron bits.

The share of individual categories of weapons found in the West Podolian group of RSK burial mounds practically coincides with the situation observed in other regions occupied by the settlement of the forest-steppe group variant of the Early Scythian culture (Table 3; Fig. 8)⁸. Thus, for the

⁸ When calculating the average rate of participation of individual categories of weapons in the Early Scythian burials with weaponry coming from the forest steppe zone of the Black Sea area, only complexes from the basin of the Middle Dniester, the right-bank of the Middle Dnieperland and the basins of the Sula and Vorskla have been taken into account. This state of the research is due to two factors. Firstly, these areas provide the largest series of burials with weapons, secondly, only in those areas all categories of weapons have been observed.

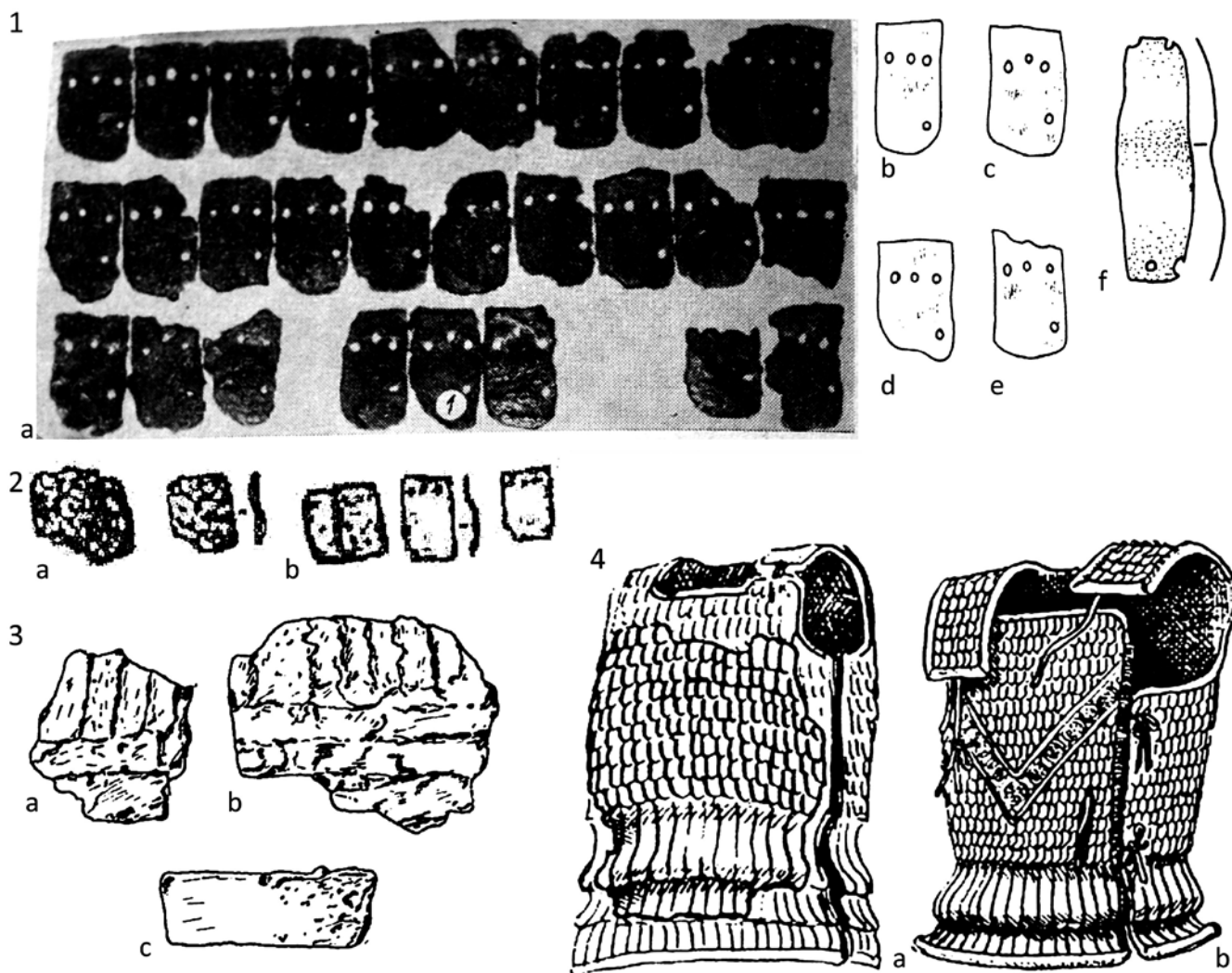


Fig. 7. Body armour and the reconstruction of burial complexes of the West Podolian group of RSK. 1 – Dolinány, k. 2; 2 – Šutnivcy, k. 3; 3 – Sirvatinci (Serwantyńce), k. 2; 4 – Švajkivci k. 1. All have no scale. (1a – by G. I. Smirnova 1977; 1b–f – by S. V. Černenko 2006; 2 – by A. F. Gucal, V. A. Gucal 2009; 3 – by T. Sulimirski 1936; 4 – by M. Bandrivs'kij 2009a)

Ryc. 7. Uzbrojenie ochronne i jego rekonstrukcja z zespołów grobowych zachodniopodolskiej grupy RSK. 1 – Dolinány, k. 2; 2 – Šutnivcy, k. 3; 3 – Sirvatinci (Serwantyńce), k. 2; 4 – Švajkivci, k. 1. Wszystkie bez skali. (1a – wg G. I. Smirnova 1977; 1b–f – wg S. V. Černenko 2006; 2 – wg A. F. Gucal, V. A. Gucal 2009; 3 – wg T. Sulimirski 1936; 4 – wg M. Bandrivs'kij 2009a)

most frequently occurring elements of weapons, encountered in the dominant number of burials it is necessary to mention arrowheads, which in many cases are accompanied by quivers / gorytos or their components. The second place is occupied by spears (spearheads) – their presence have been revealed on average every third (in the West Podolian group of RSK in every fifth) burial. Next places are taken by cutting weapons and blunt weapons. It should be noted that for the West Podolian group of RSK the predominance of blunt weapons finds over the cutting weapons is characteristic – the ratio is 3: 2 in favour of blunt weapons. A similar situation was observed only for complexes from the Sula river basin on the left-bank of the Middle Dnieperland, but in this case the proportion is even more pronounced – one complex with cutting weapons versus two complexes with blunt weapons. As for the most rarely encountered group of weaponry, it is necessary to include the finds of body armour for protection in the form of armour and combat belts or their elements (metal scales).

These objects are found on average every tenth burial with weapons. Moreover, quite often it is possible to find burials with weapon accompanied by the elements of the horse harness. Apart from the most extreme cases (starting from no burials with weapons and horse tack on the left-bank of the forest-steppe Terrace of Dnieperland and in the basin of the Seversky Donets, up to 100% participation in the Psel river basin due to the presence the only one Early Scythian burial with weapons in the zone), involvement of horse harness elements in particular groups of forest-steppe variant of the Scythian culture is diverse and ranges from approx. 19–22% in the Vorskla and West Podolian groups, to 51 or even 68% in the Right-Bank and Sula groups.

The analysis of burial complexes with weapons of the West Podolian group of RSK also let us reconstruct the military structure of that group to a certain degree. However, it is necessary to remember that the weapons deposited together with the dead in the grave cannot be regarded as an accurate reflec-

Table 3

Finds of weapon in the burials of the West Podolian group of RSK and in parallel temporarily complexes from other areas occupied by the settlement groups of the forest-steppe variant of the Scythian culture

Tabela 3

Znaleziska broni w pochówkach zachodniopodolskiej grupy RSK i we współczesnych im zespołach z innych stref zajętych przez osadnictwo grup leśnostepowego wariantu kultury scytyjskiej

Region	Middle Dniesterland (49*)	Forest-Steppe Right-Bank of the Dnieperland (71)	Left-Bank of the Dnieper Terrace Forest-Steppe (2)	Psel (1)	Sula (31)	Vorskla (31)	Siverskyi Donets (9)
Category of weaponry							
Arrows and/or gorytos/quiver	44 (90**)	55 (77)	2 (100)	1 (100)	24 (77)	24 (77)	5 (56)
Spear	11 (22)	33 (46)	–	–	18 (58)	5 (16)	1 (11)
Blunt weapon	6 (12)	10 (14)	–	–	10 (32)	1 (3)	1 (11)
Cutting weapon	4 (8)	19 (27)	1 (50)	–	5 (16)	8 (16)	2 (22)
Body armour	7 (14)	9 (13)	1 (50)	–	4 (13)	1 (3)	–
Horse harness	11 (22)	36 (51)	–	1 (100)	21 (68)	6 (19)	–

* In brackets – total number of burials with weapon in the zone.

** The first number – amount of burials with particular elements of weapon. In brackets – their share in percentage.

Sources (also considering Table 4–5): G. T. V. A. Il'inskaâ 1968; G. T. Kovpanenko 1970; B. A. Šramko 1987; G. T. Kovpanenko et al. 1989; N. M. Bokij, V. S. Ol'hovskij 1994; V. Ŭ. Murzín, R. Rolle, S. A. Skorij 1995; A. V. Bandurovskij, Ŭ. V. Bujnov 2000; Ŭ. N. Bojko, S. I. Berestnev 2001; D. S. Grečko 2010; I. M. Kulatova, O. B. Suprunenko 2010; V. Grigor'ev, S. Skoryj 2012; D. Voroncov, S. Skoryj 2012; Ŭ. O. Bílan, O. B. Soltis 2014.

* W nawiasie podano ogólną ilość pochówków z bronią w danej strefie.

** Pierwsza cyfra – ilość pochówków z danym elementem uzbrojenia. W nawiasie podano ich udział w procentach.

Źródła (także do tabel nr 4–5): G. T. V. A. Il'inskaâ 1968; G. T. Kovpanenko 1970; B. A. Šramko 1987; G. T. Kovpanenko et al. 1989; N. M. Bokij, V. S. Ol'hovskij 1994; V. Ŭ. Murzín, R. Rolle, S. A. Skorij 1995; A. V. Bandurovskij, Ŭ. V. Bujnov 2000; Ŭ. N. Bojko, S. I. Berestnev 2001; D. S. Grečko 2010; I. M. Kulatova, O. B. Suprunenko 2010; V. Grigor'ev, S. Skoryj 2012; D. Voroncov, S. Skoryj 2012; Ŭ. O. Bílan, O. B. Soltis 2014.

tion of the role of a warrior in life, because the collection of deposited grave goods was affected by a number of different factors (V. S. Ol'hovskij 1991, pp. 73–75). However, as noted by D. S. Grečko (2008, p. 28); „Precautionary approach to the assessment of source data, not their absolutist approach, but the desire to see general trends based on them, lets us come to conclusions that they have real historic bases”. On the other hand, correct inference on the topic is difficult to develop owing to most robbed burials – therefore it is not possible to give a definite answer to the question to what extent the analyzed sets of weapons are complete, and to what extent they are deprived of some more expensive elements of weapons, such as cutting weapons and armour. Taking everything into consideration, it makes that the presented findings have only preliminary character and they will be complemented with further growth of source data. Coexistence of different categories of weapons and elements of horse harness (mostly bits and cheek-pieces) are shown in table 4. Table 5 presents, in turn, general characteristics of the West Podolian military units. In addition, both tables, apart from the data concerning the analyzed cultural unit, they also provide information on selected groups of the forest-steppe variant of the Scythian culture. This will allow us to place the graves with weapons of the West Podolian group of RSK in a wider context of warriors' burials of the forest steppe zone of the Black Sea area in the Early Scythian period. The analysis of both of these tables leads to the following conclusions.

First of all, the analysis of the weaponry sets in terms of quantity of these categories of objects indicates that the Middle Dniesterland, as in most other regions occupied by the settlement of the forest-steppe variant of the Early Scythian culture (apart from the Sula group) is dominated (from 50% to 80% burials with weapons) by the sets consisting of one category of weapons (mainly arrows), which are often also accompanied by elements of the horse harness. The two-piece sets of weaponry were less than every fifth (18%) burial with weapons of the West Podolian group of RSK. At a similar level there was the frequency of burials with at least three categories of weapons (18%), which let us place the West Podolian graves between the burials of the Vorskla group (only 10% of burials from at least three categories of weapons), and the burials of the Right-bank and Sula groups (respectively 30 and 39% of the burials with three or more types of weapons).

Secondly, the quota of military formations regarding the West Podolian group of RSK consisted mainly of infantry (77%) and to a lesser extent, the cavalry (23%). A similar situation, i.e. a significant predominance of infantry on the cavalry has been noticed in the case of the Early Scythian community located in the basin of the Vorskla river (respectively 81 and 19%). Whereas the situation in the forest-steppe right-bank of the Dnieperland and the Sulalund used to be different, where the cavalry (to a lesser or greater extent) prevailed over infantry. The advantage of infantry over cavalry as for the Middle Dniesterland warriors indicates hand-to-hand combat as the

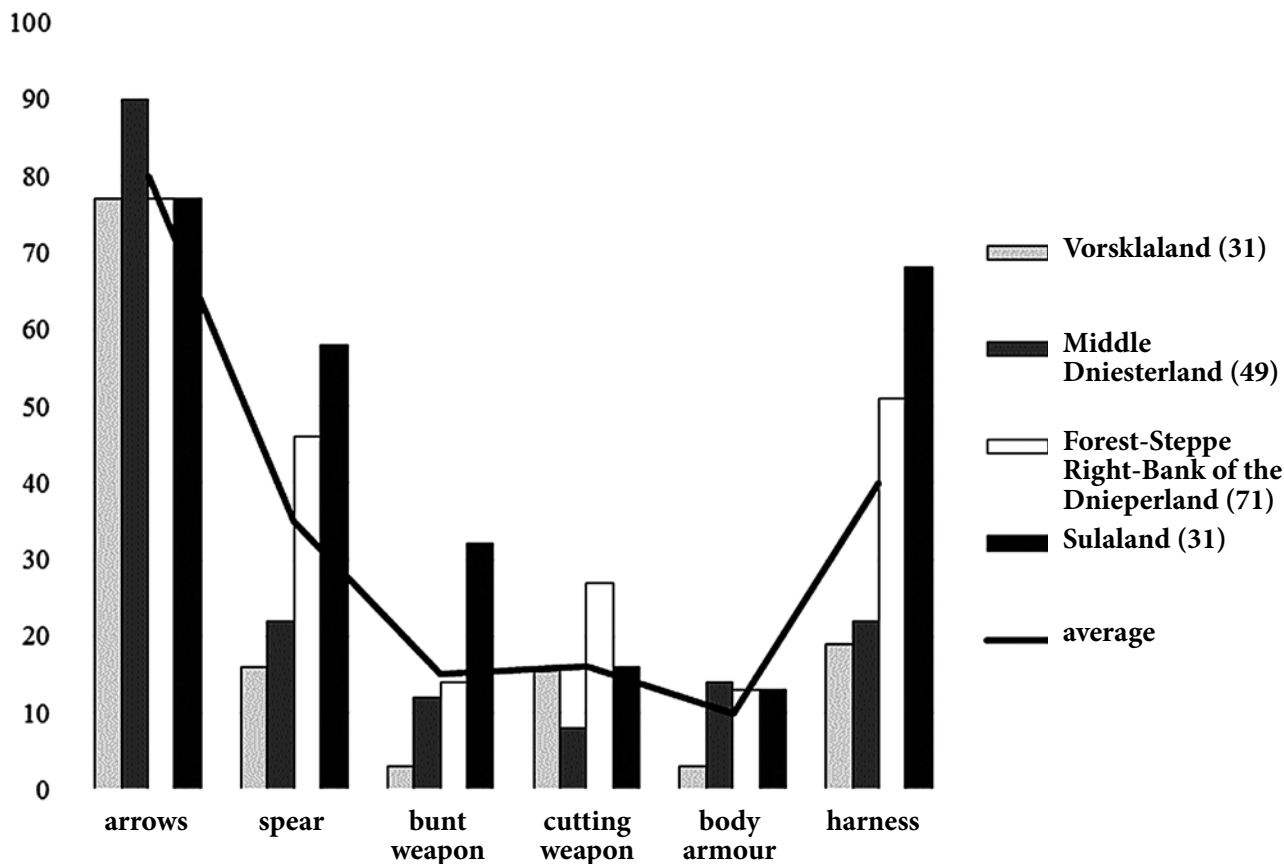


Fig. 8. Participation of individual categories of weapons and horse harness components in the Early Scythian burials with weapon in selected forest-steppe zones of the Black sea area (see table 3)

Ryc. 8. Udział poszczególnych kategorii uzbrojenia i elementów rzędu końskiego we wczesnoscytyjskich pochówkach z bronią w wybranych strefach lasostepu nadacznomorskiego (wg tabeli 3)

basic military tactics used by the population of the analyzed cultural group. According to the already cited D. S. Grečko (2008, p. 12), the most reasonable tactic for this type of army (troops) are „defensive settlements used as shelters [refugia - MB] for unarmed people and property, while troops met the enemy in the field.” The use of such tactics by the West Podolian population seems to be the most rational⁹.

Thirdly, among the burial complexes with weaponry of the West Podolian group of RSK, the distinctive collection are the burials equipped with several arms elements. On the one hand, the inventories consist of at least three kinds of offensive weapons, and on the other hand – the armour, whereas the latter items are also common in groups with less numerous regarding offensive weapons. In both cases the sets of arms are generally accompanied by some elements of horse

tack. These burials can be described as heavily-armed warriors (both infantry and cavalry). With regard to the environment of the analyzed cultural group, such burials occurred in eight cases (18%). Comparing the burials of heavily-armed warriors coming from the Middle Dniesterland with others (Table 5), it is possible to point out a slightly larger share of sets of this type especially in the area of the forest-steppe right-bank of the Dnieperland (26%) and the basin of the Sula river (22%). In the basin of the Worskla river such complexes are much rarer. A distinctive feature of heavily-armed warriors graves belonging to the West Podolian group is a similar share of burials built for both infantry and cavalry warriors (9%). The burials of both sets are also common within the Right bank group, but the graves with harness elements prevailed here. Quite different is the case considering the left bank of the Middle Dnieperland – for this zone a characteristic feature is the presence of burials, which can only be combined with heavily-armed cavalry. A distinctive feature of the burials of heavily-armed warriors affiliated to the West Podolian group of RSK, as well as the Sulaland group is the presence of rare finds of cutting weapon. In both cases their basic type of weapons used for hand-to-hand combat were hammer-axes, and spears to a lesser extent.

The presence of armour or higher amount of offensive weapon regarding the burial collection of heavily-armed fighters

⁹ It is true that there are no reliable finds of strongholds, which can be affiliated to this cultural group, however, a number of settlements coming from later periods (the Early Medieval period) are known, within which researchers revealed relics of the settlement related to the settlement of the analyzed cultural group (A. Mogilov 2010, pp. 108–114, Fig. 7–10). Besides, the presence of stronghold built by the population of the region within the Middle Dniesterland should not raise any doubts (*ibidem*, p. 108) as a result of a suitable for this purpose landscape.

Table 4

Sets of weapon in the Early Scythian burials with weapon in selected zones of the Black sea forest steppe

Tabela 4

Zestawy broni we wczesnoscytyjskich pochówkach z bronią w wybranych strefach lasostepu nadaczarnomorskiego

	Middle Dniesterland	Forest-Steppe Right-Bank of the Dnieperland	Sula	vorskla
Arrows	23 (47)	16 (23)	3 (10)	15 (48)
Spear	2 (4)	4 (6)	–	3 (10)
Blunt weapon/ cutting weapon	–	2 (3)	–	3 (10)
Arrows and horse harness	5 (11)	10 (14)	5 (16)	4 (13)
Spear and horse harness	–	5 (7)	2 (6)	–
Blunt weapon/ cutting weapon and horse harness	–	–	1 (3)	–
Arrows and spear	4 (8)	4 (6)	5 (16)	1 (3)
Arrows and blunt weapon/ cutting weapon	3 (6)	3 (4)	–	2 (6)
Spear and blunt weapon/ cutting weapon	–	1 (1)	2 (6)	–
Cutting weapon and blunt weapon	–	–	–	1 (3)
Arrows, spear and horse harness	1 (2)	4 (6)	6 (19)	–
Spear, blunt weapon/ cutting weapon and horse harness	–	1 (1)	–	–
Arrows, , blunt weapon/ cutting weapon and horse harness	1 (2)	3 (4)	–	1 (3)
Arrows, spear and blunt weapon/ cutting weapon	1 (2)	3 (4)	–	–
Spear, blunt weapon and cutting weapon	–	1 (1)	–	–
Spear, blunt weapon, cutting weapon and horse harness	–	–	1 (3)	–
Arrows, spear, blunt weapon and cutting weapon	–	1 (1)	–	–
Arrows, spear, blunt weapon, cutting weapon (or without blunt weapon, cutting weapon) and horse harness	2 (4)	5 (7)	2 (6)	1 (3)
Body armour	2 (4)	1 (1)	–	–
Arrows and body armour	2 (4)	–	–	–
Arrows, body armour and horse harness	1 (2)	2 (3)	–	–
Spear, body armour and horse harness	–	1 (1)	–	–
Blunt weapon, cutting weapon and body armour	1 (2)	–	–	–
Arrows, spear, body armour and horse harness	1 (2)	2 (3)	–	–
Blunt weapon, cutting weapon, body armour and horse harness	–	–	1 (3)	–
Arrows, spear, blunt weapon, cutting weapon (or without blunt weapon, cutting weapon), body armour and horse harness	–	3 (4)	3 (10)	–
TOTAL	49 (100)	71 (100)	31 (100)	31 (100)

indicates a high degree of military specialization of the dead. Thus, these complexes can be classified into the burial group (already distinguished among the Scythian burial group) so-called „warriors-troopers” (e.g. S. S. Bessonova 1998). Such graves, known from the range of the West Podolian group of RSK, belong to the oldest burial horizon of the troop members within the forest-steppe of the Black Sea area dating back to the period from about mid-seventh century BC. As regards the interpretation of the dead buried there, according to S. S. Bessonova (1998, p. 57), in most cases they were members of the „troops of the political chiefs ruling the Scythian tribes”. Also, other researchers link the so-called „troop” burials, combined with the graves of local military elites (e.g. V. D. Bere-zuckij 1992, p. 11; 2007, p. 71; D. S. Grečko 2008, p. 29).

Discussing the issue regarding the military structure of the West Podolian group of RSK, it is necessary to consider it in a broader social differentiation of the entire population of this cultural group. The analysis of the criteria generally

considered as indicators of social status of the deceased (the size of the earth mound, the size and complexity of the burial structure, and to a lesser extent the inventory of grave goods) showed that the heavily-armed warriors, so-called „troopers” were not a homogenous group and they belonged to different social groups.

Undoubtedly, the highest level in the hierarchy among heavily-armed warriors and the entire community of the West Podolian group was occupied by representatives of local elite (aristocracy) as a kind of „military aristocracy” or „military leaders – chiefs „(6% of the burials with weapons). The dead belonging to this social level were buried in the largest (the surface at least 45 m²) wood-and-stone burials of a complex form covered by the largest (the average height of 2 m, the diameter 37 m) barrow-mounds. These burials compared to other constructions were outstanding due to the presence of rich and diverse funerary equipment, which included, among others, imports and objects of prestigious character. As regards the

Table 5

Military structure of the West Podolian group of RSK in the light of selected groups of the forest-steppe variant of the Scythian culture*

Tabela 5

Struktura wojska zachodniopodolskiej grupy RSK na tle wybranych grup leśnostepowego wariantu kultury scytyjskiej*

	Middle Dniesterland	Forest-Steppe Right-Bank of the Dnieperland	Sula	Vorskla
Lightly-armed infantry	32 (68)	28 (40)	10 (33)	25 (81)
Heavily-armed infantry	4 (9)	5 (7)	–	–
Lightly-armed cavalry	7 (14)	24 (34)	14 (45)	5 (16)
Heavily-armed cavalry	4 (9)	13 (19)	7 (22)	1 (3)
TOTAL	47** (100)	70 (100)	31 (100)	31 (100)
Infantry	36 (77)	33 (47)	10 (33)	25 (81)
Cavalry	11 (23)	37 (53)	21 (67)	6 (19)
Lightly-armed warriors	39 (82)	52 (74)	24 (78)	30 (97)
Heavily-armed warriors	8 (18)	18 (26)	7 (22)	1 (3)

* Lightly-armed infantry is recognized as complexes with one – two categories of armaments, as heavily armoured – complexes with elements of body armour (cuirass), or in the case of its absence, of at least three categories of weapon. A similar division is also made in the case of cavalry. With regard to table 4 the finds of cuirass itself are not included in the calculations.

** The calculations do not include burials which inventory consists of only individual elements of body armour (single metal scales). This remark also applies to the complexes from the Forest-Steppe Right-Bank of the Dnieperland.

* Jako lekkobrojna piechota uznane zostały zespoły z jedną – dwoma kategoriami uzbrojenia, jako ciężkobrojna – zespoły z elementami uzbrojenia ochronnego (pancerzami) lub w przypadku ich braku z co najmniej trzema kategoriami uzbrojenia. Analogiczny podział ma miejsce również w przypadku konnicy. W stosunku do tabeli 4 w wyliczeniach nie uwzględniono znalezisk samych pancerzy.

** W wyliczeniach nie uwzględniono pochówków, których inwentarz stanowiły wyłącznie pojedyncze elementy uzbrojenia ochronnego (pojedyncze metalowe łuski). Uwaga ta dotyczy również zespołów z obszaru Prawobrzeżnego Leśnostepowego Podnieprza.

military deposited there, it is necessary to indicate the characteristic presence of elements of armour and two-element sets of blunt weapon (hammer-axe + battle axe). In the case of the other graves with armour and a few-item sets of weapon we should notice either the burials of inferior aristocratic class or the burials of outstanding warriors, coming from the „middle” level of the discussed population. However, it is worth noting that the analysis of the characteristics regarding burial rites, treated as social criteria for the identification of the dead indicate a greater role of the latter (10% vs. 2%). These burials are distinguished in comparison with other graves (especially male) linked to the same social state as evidenced by not only the richer inventories with the dominant role of weapons but also the greater size and structure of burial mounds covering them. These features allow us to assign these buried heavily-armed warriors („troopers”) to a higher level of middle-level („middle class”) in the social hierarchy of the population of the West Podolian group of RSK.

Light cavalry and infantry recruited from representatives of the lower social class, largely identified with the largest, middle level of Middle Dniesterland population (18%). However, at the same time such features as the middle size of the construction (the average size is between 15 and 25 m²), more or less complex burial structures and an average degree of grave goods indicate that the dead mostly belonged to a higher level within this class. It seems that the best armed light warriors, as well as a part of heavily-armed warriors, who were not members of the higher social strata, were a part of the local

military troops, headed by the members of the aristocracy. The main type of weapon was a bow and arrows, which were accompanied by a spear, a hammer-axe or a dagger. Only in a few cases, these sets were supplemented with elements of the horse harness. It is striking that these items almost completely exclude the spearheads – with regard to 5 complexes equipped by this type of weapon, only one of them contained a bit with cheek pieces.

Other military force were formed by infantrymen (51%) or cavalrymen (10%) equipped with single military items – a bow and arrows or a spear, while also in this case spears were not accompanied by horse tack. The analysis of the size and complexity of burial structures and the selection of the inventory accompanying the dead indicate that individuals equipped with single elements of armaments took a lower social level than the dead armed with higher quantity of weapons. However, this group was not homogenous in terms of belonging of the dead to particular social groups. Some of them probably belonged to the lowest strata – it is confirmed by the presence of simple burial constructions, their small size (approximately 1.5–2 m²) and poor collection of grave goods, limited only in extreme cases to arrowheads. It should be noted that the stratum provided only infantrymen – there is no even one case where there was one example of horse harness elements in the grave. Nevertheless, there were others deceased, equipped in the grave with only one kind of weapon, and sometimes also in parts of the harness, while alive they probably belonged to the middle level of the West Podolian society. This is evidenced by

larger and more complex burial structures and a more diverse composition of the inventory. At the same time, the differences between them might indicate that individual dead warriors, even though they belonged to one social group, however they differed among themselves as for their ranks.

Inability to determine the areas where there was the origin of „the creators of” the West Podolian group of RSK (it is assumed that in the case of this group its origins should not be associated with the further development of the local population but with the arrival of groups of people from the outside – see below), a small amount well established dating ranges of burial complexes together with their robbery cause significant obstacles regarding the research carried out on changes in military structures in the discussed society, which undoubtedly occurred. Nonetheless, based on existing data, it is possible to make some observations.

Considering the military tactics of the West Podolian population of RSK and the set of used weaponry, it is worth mentioning that these elements were influenced by several factors. The most important of them, at least in the oldest phase, it is necessary to associate with genetic processes that led to the formation of this cultural group. It is because the predominant effect on the formation (as in the case of other forest-steppe groups affiliated to the Scythian culture) was the arrival of relatively small Nomads groups (?)¹⁰ at these areas of the Scythian cultural model. It is important that the newcomers were men – usually the cavalry warriors¹¹, who got married to the local women (G. I. Smirnova 1998, p. 460). That is why, it is obvious that the oldest sets of weapons and tactics should correspond to Nomads. A similar technique of warfare should be led by the direct descendants of newcomers – their „children” (and grandchildren?), constituting the most likely local elites. However, with regard to the burial complexes of the West Podolian group of RSK, the elements of horse harness did not appear very often. These objects are definitely more common in the graves of warriors associated with other forest-steppe variant groups of the Scythian culture (Tables 3–5). In the closely situated group of the Right bank group, the elements of horse harness occur in more than half (51%) burials with weapons. The percentage of so-equipped graves is even higher (68%) in the case of the Sula group, which presents some similarities with the West Podolian group of RSK, seen primarily in

high-role of blunt weapons and specific sets of arms (at least three types of arms, including the always-present set of blunt weapon type hammer-axe + battle axe) appearing only in the richest graves of warriors (the West Podolian group RSK – Perebykivci, k. 2 and Švajkivci, the Sula group – Starša Mogila, Luka (V. A. Il'inska 1968, Table I–IV XLVIII)). Taking into account these findings and the fact that the most West Podolian barrows show the signs of robbery, it is possible to assume that the percentage of cavalry warriors burials in the Middle Dniesterland originally was much larger than was presented in archaeological sources.

Later on, due to various external factors such as the threat from enemies (other nomadic Scythian groups?), participation of individual warriors or the whole military groups (troops) (under the supervision of representatives of local elites?) in all sorts of military ventures (military expeditions) outside of the home areas of the West Podolian group of RSK¹² and finally, the general trend in the art of war of Nomads whose echoes probably reached the Central Dniesterland causing that military tactics and weapons sets used by the Middle Dniesterland warriors changed. A minor role in these changes probably was played by the local, indigenous people, and even less important were contacts with other communities representing different ways to fight¹³. Local population, which underwent rapid acculturation (cf. A. Gawlik 2010, pp. 162–163), provided probably the poorest mainly the infantrymen.

In summary, taking into account the observations on the types of weapons, their sets and other military issues related to the population of the West Podolian group of RSK, it is worth mentioning that their image does not differ from other communities of the forest-steppe variant of the Scythian culture. The common element for the burials with weapons from not only the forest-steppe area located on the northern Black Sea territories but also from the steppe zone, is the fact that these objects occurred during the Early Scythian period almost exclusively in the male graves. The most numerous and the most „democratic” kind of weapon was a bow with arrows. In wealthier military burials there were also other categories of offensive weapons – spears, blunt weapon (hammer-axes and battle axes) and cutting weapon. The richest warriors, including members of local elites, apart from a couple-element sets of weapons, they were also equipped in scale armour, trimmed with metal plates. In every fifth burial with weapons there were examples of horse harness elements indicating slightly smaller role of cavalry than it was in the case in the other forest-

¹⁰ The strength of the Nomads was not determined by their number but their mobility and military tactics with the dominant role of cavalry formations. What is more, it is rather true that the number of newcomers (Nomads) did not exceed the size of the local, indigenous population (A. Gawlik 2010, p. 162).

¹¹ Of course, the newly arrived warriors were not a social unified group but they differed among themselves as for their status. This is particularly evident in the first stage migration associated with „reconnaissance activities”. It is very possible to assume that a decisive role at this stage was played by military groups – troops. At their head there were probably the representatives of military elites, who were accompanied by people of a lower social status, whereby there is no doubt that most of them belonged to the group of professional warriors. In addition to specialized warriors there were probably others full-fledged members of the community in the group, for whom the participation in this type of trip was an opportunity to enrich themselves and thereby improve their financial status and perhaps social one.

¹² Such a possibility has been indicated by J. Chochorowski (2014, p. 41, 43), who claims that the groups of warriors coming from the environment of the West Podolian group of RSK could participate in Scythian (or groups of people who used the Scythian types of weapons) forays into Central Europe (the areas located to the north-west of the Carpathian Basin) which occurred between the end of 7th and the turn of 7th / 6th century BC and the last quarter? of 6th century BC.

¹³ This last possibility could be justified due to the presence of an iron adze with sides in the inventory of the barrow No. 2 in Perebykivci. As for their home areas (the Hallstatt environment) they are in fact in contexts that it is possible to unambiguously treat it as weapons (J. Chochorowski 2009, p. 95). However, as shown by the analysis of iron adzes with sides occurring in Scythian complexes, such objects were clearly used as tools not weapons (J. Adamik, M. Burghardt 2012).

steppe group variants of the Scythian culture. The presence of a couple-element sets of offensive weapons and armour in their graves indicates the presence of professional warriors in the Middle Dniesterland group, the so-called „troopers”. These warriors were part of the military troops (bands), headed by the members of the local upper class (elite). The presence in almost all these graves of numerous finds of weapons, demonstrates military character of this group.

Collation 1. The list of burial complexes of the West Podolian group of RSK equipped with armament items:

1. Bikiv/Byków¹⁴, k. 1 – lit.: J. Mahnik, D. Pavliv, V. Petegirič 2003;
2. Bratišiv/Bratyszów, k. 1–3, 5 – lit.: T. Sulimirski 1936, s. 45–53, 55–59;
3. Čabanivka, k. 1 – lit.: A. F. Gucal, V. A. Gucal, V. P. Megej 2001;
4. Dolinány, k. 2–4 – lit.: G. I. Smirnova 1977; S. V. Černenko 2006, s. 30, 71, tabl. 1: 1; 21: 377;
5. Dupliska, k. 1 – lit.: T. Sulimirski 1936, s. 70;
6. Gorodek/Gródek nad Dniestrem, k. 1 – lit.: T. Sulimirski 1936, s. 68–69;
7. Gorodnica/Horodnica, k. 1 – lit.: T. Sulimirski 1936, s. 67;
8. Ivahnivci /Iwachnowce, k. 1 i 2 – lit.: T. Sulimirski 1936, s. 88–92; M. Bandrivs’kij 2010, s. 90;
9. Ivankivci, k. 9 – lit.: A. F. Mogilov et al. 2008, s. 92–93;
10. Kačanovka/Kaczanówka – lit.: T. Sulimirski 1936, s. 84;
11. Kocūbinčinki/Kociubińczyki, k. 2 – lit.: M. S. Bandrivs’kij 2009; 2013, s. 348–353;
12. Kolodivka, k. 1, 8, 11 i 19 – lit.: A. F. Gucal et al. 2005, s. 118; A. F. Gucal et al. 2006, s. 158, 159; A. F. Gucal et al. 2007, s. 159–160;

13. Krugle/Krağle, k. 1 – lit.: T. Sulimirski 1936, s. 74;
14. Kruglik – lit.: G. I. Smirnova 1969, s. 14–18;
15. Ladičin/Ładyczyn, k. 1 – lit.: T. Sulimirski 1936, s. 85–87;
16. Lenkivcy, k. 1 – lit.: A. I. Melūkova 1953, s. 60–65;
17. Loivci, k. 1 – lit.: L. Krušel’nic’ka 1998, s. 129–133, ryc. 82, 83;
18. Min’kivci/Mińkowce, k. 1, p. 1 – lit.: M. S. Bandrivs’kij 2010, s. 86, ryc. 3;
19. Myškovce/Myszkowce (obecnie Celiiv), k. 1 – lit.: Ū. M. Maleev 1991;
20. Novoselka-Grimajlovská/Nowosiółka Grzymałowska, k. A, C – lit.: T. Sulimirski 1936, s. 81–84; S. V. Černenko 2006, s. 30;
21. Perebikivcy, k. 2, 3 i 5 – lit.: G. I. Smirnova 1979, s. 45–47, 50, ryc. 7: 1–2; 8; 9: 2, 10; 10; s. 53, ryc. 12: 1–5; s. 57, ryc. 15: 1–3, 6–7, 10;
22. Sirvatinci/Serwatynce, k. 2 – T. Sulimirski 1936, s. 95–97; S. V. Černenko 2006, s. 30¹⁵;
23. Sokilec, k. 3 – lit.: M. Bandrivs’kij, V. Zhar’ev 2002;
24. Spasivka, k. 1, 8 i 9 – lit.: A. F. Gucal 2012, s. 149–150, 152–154;
25. Šidlivci/Szydłowce, k. 1 – lit.: T. Sulimirski 1936, s. 74–75;
26. Šutnivci, k. 1, 3, 5 i 6 – lit.: A. F. Gucal, V. A. Gucal 2009, s. 6, 8–9, 10–12; 2009a;
27. Švajkivci/Szwajkowce, k. 1 – lit.: M. Bandrivs’kij 2009a; 2013, s. 342–348;
28. Teklivka, k. 1 – lit.: Gucal et al. 2008, s. 7–9;
29. Vikno, k. 1 – lit.: A. Mogilov 2010, s. 117, ryc. 11: 5–6;
30. Zawadivcy/Zawadyńce, k. 1 – lit.: T. Sulimirski 1936, s. 99;
31. Zozulince/Zazulince, k. 1 – lit.: Ū. M. Maleev 2007.

THE LIST OF CITED LITERATURE

- Adamik J., Burghardt M.
2012 Scytyjskie żelazne ciosła z bocznymi występami, „MSROA”, t. 33, s. 115–133.
- Bandrivs’kij M. S. [Bandrivskij M. S.]
1994 *Skrin’kovi pohovannâ vysoc’koï kul’turi v mežiričči Zbruča i Stripi*, L’viv.
- 2009 Kocūbinčiki-2 – novij pamâtnik epohi skifskoj archaiki na Srednem Pridnestrov’ë (predvaritel’noe soobščenie), „Bosporiskij fenomen”, 2009, s. 30–38;
- 2009a Novij ritual’nij ob’ëkt časiv skifs’koï archaiki zi Švajkivce’ bilâ Čortkova na Ternopil’sini (popередne povidomlennâ), [w:] *Vzaemozvâzki kul’tur epoh bronz i rannogo zaliza na teritorii Central’noï Evropy. Zbirka naukovih prac’ na pošanu Larisi Ivanini Krušel’nic’koï*, Kiïv-L’viv, s. 202–220.
- 2010 Obrazotvorčii tradicii na zahodi Ukraïns’kogo lasostepu v VII-napočatku VI st. Do nar. Hr.: vitoki i pričini transformacii, „Arheologičeskij Al’manah”, 21, s. 145–177.
- 2010 Pamâtniki srednodnistrovs’koï (zahidnopodil’skoï) grupi rannozaliznogo viku v central’noevropejs’kij hronologičnij škali ta problem periodizacii, „Materiali i doslidžennâ z arheologii Prikarpatâ i Volini”, 14, 2010, s. 76–113.
- 2011 Vostočnohalštatskij import – novyj istočnik dlâ datirovki kurganov srednedestrovskoj (zapadnopodol’skoj) grupy (po materialam uspal’nicy v Švajkovcah vozle Čortkova na Ternopol’sčine), [w:] Alekseev A. Ū., Aleëksin V. A. (red.), *Materialy Kruglogo stola „Perehodot epohi bronz i epohe železa v Severnoj Evrazii*, Sankt-Peterburg, 23–24 iūnâ 2011 goda, s. 59–63.
- 2013 Kurgany v Švajkovcah i Kocūbinčikah – novyj istočnik dlâ datirovki Zapadno-podol’skoj grupy ranneskifskoj kultury (za materialam raskopok 2007–2009 gg.), „Rossijskij Arheologičeskij Ežegodnik”, 3, s. 341–361.
- Bandrivs’kij M., Zhar’ev V.
2002 Pro odin tip pohoval’nih sporud periodu rannogo zaliza na Srednomu Pridnistrov’i (Za materialami raskopok kurganu III v seli Sokilec’ v 1999 roci), „Zapiski Naukovogo tovaristva imeni Ševčenko”, t. 244, L’viv, s. 545–562.
- Bandurovskij A. V., Bujnov Ū. V.
2000 *Kurgany skifskogo vremeni, severskodoneckij variant*, Kiïv.
- Berezuckij V. D.
1992 O social’noj interpretacii srednodonskih podkurgannyh pogrebenii skifskogo vremeni, [w:] *Kimmerijscy i skify*, Melitopol’, s. 10–11.

¹⁴ After the slash the Polish name of the village is given.

¹⁵ C. V. Černenko PDF 2006 (p. 30) mistakenly attributed the illustrations and descriptions of armor of the Serwatynce complex to the barrow No. „A” from Nowosiółki Grzymałowskie.

- 2007 K voprosu o social'nyh otnošeníah naseleniâ Srednego Dona v skifskoe vremâ (VI-IV vv. do n.e.), [w:] *Problemy arheologii nižnego Povolž'â*, Volgograd, s. 70–73.
- Bessnova S. S.
- 1998 Druzhinnye kurgany v ukrainskoj lesostepi skifskogo vremeni, [w:] *Skify, Hazary, Slavâne, Drevnââ Rus'. K 100-letiu so dlâ roždeniâ M. I. Artamanova*, Sankt-Peterburg, s. 57–58.
- Bílan Ů.O., Soltis O. B.
- 2014 *Velkij kurgan rann'oskifs'kogo času poblizu sela ĭvankoviči na Kiivšini*, Kiiv.
- Bojko Ů. N., Berestnev S. I.
- 2001 *Pogrebeniâ VII-IV vv. do n.e. kurgannogo mogil'nika u s. Kuplevaha (Vorsklinskij region skifskogo vremeni)*, Har'kov.
- Bokij N. M., Ol'hovskij V. S.
- 1994 Ranneskifskij kurgan na Dneprovskom Pravoberež'e, „Ros. Arch”, t. 2, s. 151–163.
- Chochorowski J.
- 2009 „Halsztatzycja“ wschodniej części Kotliny Karpackiej, [w:] Czopek S., Trybała-Zawislak K. (red.), *Tarnobrzaska kultura lużycka – źródła i interpretacje*, Rzeszów, s. 89–118.
- 2014 Scytowie a Europa Środkowa – historyczna interpretacja archeologicznej rzeczywistości, „MSROA”, t. 35, s. 9–58.
- Černeko E. V.
- 1968 *Skifski dospeh*, Kiev.
- 1981 *Skifskie lučniki*, Kiev.
- 1984 Dlinnye kop'â skifov, [w:] *Drevnosti Evrazii v skifo-sarmatskoe vremâ*, Moskva, s. 231–232.
- 2006 *Die Schutzaffen der Skythen*, (=Prähistorische Bronzefunde, 3/2), Stuttgart.
- Esaân S. A., Pogrebova M. N.
- 1985 *Skifskie pamâtniki Zakavkazâ*, Moskva.
- Gawlik A.
- 2004 Bronzovyj kinžal iz Russkich Fol'varkov, r-n Kamenec-Podol'skij, [w:] Chochorowski J. (red.), *Kimmerowie, Scytowie, Sarmaci. Księga poświęcona pamięci profesora Tadeusza Sulimirskiego*, Kraków, s. 161–168.
- 2010 Interpretation of cultural transformations in the Early Iron Age in south-Eastern Poland and Western Ukraine, [w:] Dzięgielewski K., Przybyła M. S., Gawlik A. (red.), *Migration in Bronze and Early Iron Age Europe*, Kraków, s. 153–172.
- Grečko D. S.
- 2008 Ozbroyennâ ta vijs'kova sprava naselennâ sivers'donec'kogo Lisostepu u kinci VI-IV st. do n.e., „Drevnosti 2006–2008”, s. 21–35.
- 2010 *Naselennâ skifs'kogo času na sivers'komu Dinci*, Kiiv.
- Gricûk V. M.
- 2009 *Vijs'ko skifiv (ozbroennâ, organizaciâ, vijni ta voenne mistectvo)*, Kiiv-Černivci.
- Grigor'ev V., Skoryj S.
- 2012 Kurgany u sela Gladkovščina – pamâtniki epohi skifskoj arhaiki v Levoberežnoj Pridneprovskoj terrasovoj Lesostepi, [w:] Blajer W. (red.), *Peregrinationes archaeologicae in Asia et Europa Ioanni Chochorowski dedicatae*, Kraków, s. 441–459.
- Gucal A. F.
- 2012 Roboti na pamâtkah arheologii v rajoni Satanivs'kih Tovtr, „Naykovi pracî Kam'âneč'-Podil's'kogo nacional'nogo universitetu imena Ogienka”, 21, s. 147–156.
- Gucal A. F., Gučal V. A.
- 2009 Kurganna grupa rann'oskifs'kogo času u ponizzi Smotriča, „Visnik Kam'âneč'-Podil's'kogo nacional'nogo universitetu im. ĭvana Ogienka”, vyp. 2, s. 5–15.
- 2009a Epohannij kompleks z bronzovim dzerkalom iz Ťutnovce, *Epoha rannego železa. Sbornik naučnyh trudov k 60-letiu S. A. Skorego*, 2009, s. 125–134.
- Gucal A. F., Gučal V. A., Megej V. P.
- 2001 *Rozkopki kurganiv skifs'kogo času na Kam'âneččini*, „AVvU 1999–2000 rr.”, s. 17–18.
- Gucal A. F., Gučal V. A., Megej V. P., Mogilov O. D.
- 2004 Rozkopki kurganiv epohi rann'ogo zaliza v s. Malinivci na Seredn'omu Dnistri, „AVvU 2002–2003”, Kiiv 2004, s. 114–116.
- 2005 Kurgani rann'oskifs'koï dobi bilâ sela Kolodiivka na Seredn'omu Dnistri, „AVvU 2003–2004 rr.”, Kiiv, s. 118–119.
- 2006 Rozkopki kurganiv rann'oskifs'koï dobi bilâ sela Kolodiivka u Seredn'omu Podnistrov'i, „ADvU 2004–2005 gg.”, Kiiv, s. 157–159.
- 2008 Teklivs'kij kurgannij nekropol, „Visnik Kam'âneč'-Podil's'kogo nacional'nogo universitetu im. ĭvana Ogienka”, vyp. 1, 2008, s. 6–23.
- Gucal A. F., Gučal V. A., Megej V. P., Mogilov O. D., Boltanûk P. A.
- 2007 Prodovžennâ robit na kurganah rann'oskifs'kogo času bilâ s. Kolodiivka, „ADvU 2005–2007 rr.”, Kiiv, s. 158–160.
- Gucal A. F., Gučal V. A., Mogilov O. D., Boltanûk P. A.
- 2010 Doslidžennâ kurgannoï grupi Spasivka – ĭvankivci u Pozbručči, „ADvU 2009”, Kiiv-Luc'k, s. 101–103.
- Gucal A. F., Gučal V. A., Mogilov O. D., Baženov O. L., Boltanûk P. A.
- 2008 Doslidžennâ kurganiv rann'oskifs'kogo času v rajoni serednoï tečii r. Zbruč, „AVvU 2006–2007”, Kiiv, s. 91–93.
- Gucal V. A.
- 2004 Skifs'ki kindžali z Podillâ, „Naykovi pracî Kam'âneč'-Podil's'kogo nacional'nogo universitetu imena Ogienka”, t. 12, 2004, s. 34–47.
- Il'inskaâ [Illins'kaâ] V. A.
- 1961 Skifs'ki sokiry, „Arheologîâ”, z. 12, s. 27–52.
- 1968 *Skify dneprovskogo lesostepnogo Levoberež'â (kurgany Posullâ)*, Kiev.
- Il'inskaâ [Illins'kaâ] V. A., Mozolevskij B. N., Terenožkin A. I.
- 1980 Kurgany VI v. do n.e. u c. Matusov, [w:] *Skifiâ i Kavkaz*, Kiev, s. 31–63.
- Ivantchik A. I.
- 2001 *Kimmerier und Skythen. Kulturhistorische und chronologische Probleme der Archäologie der osteuropäischen Steppen und Kaukasiens in vor- und frühskythischer Zeit*, Moskau.
- Kemenczei T.
- 2009 *Studien zu den Denkmälern Skythich Geprägter Alföld Gruppe*, Budapest.
- Kločko V. I.
- 1977 Novye dannye o tipah skifskih goritov i kolčannyh naborov VI v. do n.e., [w:] *Novye issledovaniâ arheologičeskikh pamâtnikov na Ukraine*, Kiev, s. 47–54.
- Kossack G.
- 1987 Von den Anfängen des skytho-iranischen Tierstils, [w:] *Skythika*, München, s. 24–86.
- Kovpanenko G. T.
- 1970 Kurgani poblizu s. Mačuhi na Poltavšini, „Arheologîâ”, t. 24, s. 146–170.
- Krušel'nic'ka L. I.
- 1998 *Čornolis'ka kul'tura Sredn'ogo Pridnistrov'â*, L'viv.
- Kulatova I. M., Suprunenko O. B.
- 2010 *Kurgani skifs'kogo času zahidnoï okruzi Bil's'kogo gorodiša*, Kiiv.
- Mahník J., Pavliv D., Petegirič V.
- 2003 Kurganne pohovannâ rann'oskifs'kogo času u verhiv'âh Dnistra, [w:] Gancarski J. (red.), *Epoka brązu i wczesna epoka żelaza w Karpatach polskich*, Krosno, s. 531–548.

- Maleev Ů. M.
1991 Kurgan skifskogo vremeni u s. Myškovcy v basejne r. Zbruč, [w:] *Kurgany Steпноj Skifii*, Kiev, s. 122–131.
- 2007 Zozulinci – kurgan rannoskifskogo času na Dnistri, „Zapiski Naukovogo tovaristva imeni Ševčenko”, t. 253, L'viv, s. 634–649.
- Marinescu G.
1984 Die jüngere Hallstattzeit in Nordostsiebenbürgen, „Dacia” NS, t. 28, 1984, s. 43–83.
- Medvedskaâ I. N.
1992 Periodyzaciâ skifskoj arhaiki I drevnyj Vostok, „Ros. Arch.”, 1992/3, s. 86–107.
- Melûkova A. I.
1953 Pamâtniki skifskogo vremeni na Srednem Dnestre, „Kratkie Soobščeniâ Instytutu Istorii Material'nok Kultury”, vyp. 51, s. 60–73.
- 1964 *Vooruženie Skifov*, (=Arheologić SSS. Svod Arheologićeskikh Istočnikov, vyp. D 1–4), Moskva.
- Mogilov A. [Mogilov O. D.]
2003 Detali kins'kogosporâdžennâ upamâtkahzâhîdnopodîls'koî grupiskifskogo času, „Arheologić”, nr. 2, s. 74–83.
- 2008 *Sporâdžennâ konâ skifskoi dobi u Lisostepu Shidnoi Evropi*, Kiïv – Kam'âneč'-Podîl'skij.
- 2010 KarheologićeskokarteSevernojBukovinyrannego Źeleznogoveka, „RevistaArheologocâ”, s.n., vol. V, nr. 1, p. 98–129.
- Murzin V.
1984 *Skifskâ arhaika Severnogo Pričernomorâ*, Kiev.
- Murzin V. Ů., Rolle R., Skorij S. A.
1995 Doslidžennâ Perešepins'kogo kurgannogo mogil'nika, „Arheologić” 1995/2, s. 63–72.
- Murzin V. Ů., Šlajfer V. G.
2008 Skifski sokiri-skipetri z Muzeu Istorii Zbroi u m. Zaporizžji, „Al'manah Istorii oružij”, t. 1., s. 45–53.
- Ol'hovskij V. S.
1991 *Pogrebal'no-pominal'naâ obrâdnost' naseleniâ stepnoj Skifii (VII–III vv. do n. e.)*, Moskva.
- Ol'hovskij V. S., Evdokimov G. L.
1994 *Skifskie izvaâniâ VII–III v.v. do n.e.*, Moskva.
- Polin S. V.
1987 Hronologić rannoskifskikh pamâtok, „Arheologić”, nr. 59, s. 17–36.
- Skory S. A.
2003 *Skify v Dneprovskoj Pravoberežnoj Lesostepi (problema vydeleniâ iranskogo etnokul'turnogo elementa)*, Kiev.
- Smirnova G. I.
1969 Raskopki kurganov u sel Kruglik i Dolinâny na Bukovine, ASGE, vyp. 10, s. 14–27.
- 1977 Kurgannyj mogil'nik ranneskifskogo vremeni u sela Dolinâny, „Arheologićeskij Sbornik”, 18, s. 29–40.
- 1979 Kurgany u sela Perebykovcy – novyj mogil'nik skifskoj arhaiki na Sredem Dnestre, ASGE, vyp. 20, s. 37–67.
- 1993 Vremâ poâvleniâ Skifov v karpatskom regione, [w:] Pavûk J. (red.), *Actes du XII^e Congrès International des Sciences Préhistoriques et Protohistoriques*, Bratislava, 1–7 septembree 1991, s. 198–203.
- 1998 Die Ostkarpatenregion zur Vorskythen- und Skythenzeit und die osteuropâischen Steppen. Kontakte und Migrationen, [w:] Hânsel B, Machnik J. (red.), *Das Karpatenbecken und die osteuropâische Steppe*, München-Rahden/Westf., s. 451–465.
- Šelehan' O. V.
2012 Bojovî sokiri skifskogo tipu z Pivničnogo Pričernomorâ, „Arheologić”, nr. 2, s. 3–13.
- Šramko B. A.
1987 *Bel'skoe gorodišče skifskoj epoki (gorod Gelon)*, Kiev.
- Topal D. A.
2014 Akinaki na zapadnyh rubežah Skifii: Karpato-Podnestrov'e, „Al'manah”, nr. 10, 2014, s. 103–126.
- VoroncovD, SkoryjS.
2012 Andruševskij kurgan, „Revista Arheologica”, serie nouâ, vol. 8, nr. 1–2, 2012, s. 137–153.

Marcin Burghardt

Broń i wojskowość ludności zachodniopodolskiej grupy kultury wczesnoscytyjskiej w świetle źródeł sepulkralnych

Streszczenie

W artykule omówiona została kwestia broni i wojskowości ludności zachodniopodolskiej grupy kultury wczesnoscytyjskiej. Obecność przedmiotów uzbrojenia ujawniono w 49 zespołach grobowych. Badania antropologiczne i analiza składu inwentarza ujawniła, że niemal wszystkie pochówki z bronią należały do mężczyzn lub do mężczyzn, którym towarzyszyli inni zmarli. Tylko w jednym przypadku obecność broni ujawniono w pochówku o kobiecym charakterze inwentarza.

Podstawowym rodzajem uzbrojenia ludności zachodniopodolskiej grupy kultury wczesnoscytyjskiej był łuk ze strzałami. Wykonane z różnych surowców grociki strzał ujawniono w 89,8% pochówków z bronią. Ich zróżnicowanie surowcowe i formalne przedstawia tabela 1 oraz ryciny 1–4. Drugą grupę militariów pod względem liczebności stanowią groty broni drzewcowej (włóczni). Odkryto je w 11 pochówkach (22,4%

pochówków z bronią) (ryc. 5, 1–8). Trzecie miejsce zajmują natomiast znaleziska broni obuchowej, toporów i czekanów. Reprezentowane są one przez dziesięć egzemplarzy pochodzących z ośmiu zespołów grobowych (16,3% pochówków z bronią) (ryc. 6). W trzech pochówkach znaleziono sztylety typu akinakes, a w dwóch innych dolne okucia pochew broni siecznej (tzw. trzewiki) (ryc. 5, 9–12). W siedmiu zespołach (14% wszystkich pochówków z uzbrojeniem) ujawniono obecność elementów uzbrojenia ochronnego (pancerze i ich fragmenty oraz pasy bojowe) (ryc. 7, tabela 2).

Wszystkie wyżej wymienione typy uzbrojenia znajdują doskonałe analogie na innych obszarach zajętych przez kulturę wczesnoscytyjską. Także udział poszczególnych kategorii uzbrojenia znalezionych w kurhanach zachodniopodolskiej grupy kultury wczesnoscytyjskiej pokrywa się z sytuacją za-

obserwowaną w innych regionach zajętych przez osadnictwo grup leśnostepowego wariantu kultury wczesnoscytyjskiej (tabela 3; ryc. 8).

Analiza zespołów grobowych z uzbrojeniem zachodniopodolskiej grupy RSK pozwala także na podjęcie kwestii rekonstrukcji struktury wojskowej tego ugrupowania (tabele 4–5). Kontyngent formacji wojskowych zachodniopodolskiej grupy kultury wczesnoscytyjskiej składał się przede wszystkim z piechoty (77%) i w mniejszym stopniu z konnicy (23%). Wyróżniającą się grupę stanowią pochówki wyposażone w kilkuelementowe zestawy uzbrojenia (co najmniej trzy rodzaje broni zaczepnej, pancerze). Bardzo często towarzyszą im części rzędu końskiego. Pochówki te można określić mianem pochówków ciężkozbrojnych wojowników (zarówno pieszych jak i konnych). W środowisku analizowanego ugrupowania kulturowego pochówki takie wystąpiły w ośmiu przypadkach (18%). Wartość ta jest mniejsza niż w przypadku innych grup, co wskazuje na nieco mniejszą rolę konnicy niż miało to miejsce w innych grupach leśnostepowego wariantu kultury scytyjskiej. Obecność kilkuelementowych zestawów broni ofensywnej oraz pance-

rzy w grobach wskazuje na obecność w Środkowym Podniestrzu grupy profesjonalnych wojowników, tzw. „drużynników”.

Analiza kryteriów powszechnie uznawanych za wyznaczniki statusu społecznego zmarłych (wielkość nasypu, wielkość i złożoność konstrukcji grobowych, a w mniejszym stopniu także skład inwentarza grobowego) wykazała, że najwyższe miejsce wśród całego ogółu zachodniopodolskiego społeczeństwa zajmowali przedstawiciele miejscowych elit (arystokracji) wyższego rzędu (wierzchołek „wojskowej arystokracji”, „wojskowi przywódcy – naczelnicy”) (6% pochówków z uzbrojeniem). W przypadku pozostałych grobów z pancerzami i kilkuelementowymi zestawami uzbrojenia należy dopatrywać się pochówków przedstawicieli arystokracji niższego rzędu (2%) oraz grobów wyróżniających się wojowników wywodzących się ze „średkowej” warstwy badanego społeczeństwa (10%). Lekka konnica i piechota rekrutowała się z przedstawicieli niższych warstw społecznych (średkowa warstwa środkowodniestrzańskiego społeczeństwa) (18%). Pozostałe siły wojskowe tworzyli wywodzący się z niższych warstw społecznych piesi (51%) lub konni (10%) wojownicy wyposażeni w pojedyncze militaria.